

[ 1 ] MyToramp.java

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-----  
3の倍数のトランプカード  
Android 4.4 (Kit Kat)  
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-----

\*/

package jp.kiyo.wuena.mytoramp;

import android.content.Context;  
import android.graphics.Canvas;  
import android.graphics.Color;  
import android.graphics.Paint;  
import android.graphics.Rect;  
import android.util.AttributeSet;  
import android.view.View;  
import android.content.res.Resources; //画像用  
import android.graphics.\*;  
import android.view.\*;

public class MyToramp extends View {

private Bitmap bitmap1 = null;  
private Bitmap bitmap2 = null;  
private Bitmap bitmap3 = null;  
private Bitmap bitmap4 = null;  
private Bitmap bitmap5 = null;  
private Bitmap bitmap6 = null;  
private Bitmap bitmap7 = null;  
private Bitmap bitmap8 = null;  
private Bitmap bitmap9 = null;  
private Bitmap bitmap10 = null;  
private Bitmap bitmap11 = null;  
private Bitmap bitmap12 = null;  
private Bitmap bitmap13 = null;  
private Bitmap bitmap14 = null;  
private Bitmap bitmap15 = null;  
private Bitmap bitmap16 = null;

```
private Bitmap bitmap17 = null;
private Bitmap bitmap18 = null;
private Bitmap bitmap19 = null;
private Bitmap bitmap20 = null;
private Bitmap bitmap21 = null;
private Bitmap bitmap22 = null;
private Bitmap bitmap23 = null;
private Bitmap bitmap24 = null;
private Bitmap bitmap25 = null;
private Bitmap bitmap26 = null;
private Bitmap bitmap27 = null;
private Bitmap bitmap28 = null;
private Bitmap bitmap29 = null;
private Bitmap bitmap30 = null;
private Bitmap bitmap31 = null;
private Bitmap bitmap32 = null;
private Bitmap bitmap33 = null;
private Bitmap bitmap34 = null;
private Bitmap bitmap35 = null;
private Bitmap bitmap36 = null;
private Bitmap bitmap37 = null;
private Bitmap bitmap38 = null;
private Bitmap bitmap39 = null;
private Bitmap bitmap40 = null;
private Bitmap bitmap41 = null;
private Bitmap bitmap42 = null;
private Bitmap bitmap43 = null;
private Bitmap bitmap44 = null;
private Bitmap bitmap45 = null;
private Bitmap bitmap46 = null;
private Bitmap bitmap47 = null;
private Bitmap bitmap48 = null;
private Bitmap bitmap49 = null;
private Bitmap bitmap50 = null;
private Bitmap bitmap51 = null;
private Bitmap bitmap52 = null;
```

```
int ct=0;           //実験回数のカウンター
int r;             //トランプカード識別子（乱数）
int d=0;           //3の倍数のカードを引いたカウンター
```

```

int flag=0;           //自動識別子
int syoki=0;        //初期化識別子

int width;
int height;

public MyToramp(Context context) {
    super(context);
    init(context);
}

public MyToramp(Context context, AttributeSet attrs) {
    super(context,attrs);
    init(context);
}

public MyToramp(Context context, AttributeSet attrs,int defStyle) {
    super(context,attrs,defStyle);
    init(context);
}

@Override
protected void onDraw(Canvas canvas) {
    // TODO 自動生成されたメソッド・スタブ

    float a=0;
    float b=0;

    super.onDraw(canvas);
    canvas.drawColor(Color.WHITE);
    Paint paint = new Paint();
    paint.setColor(Color.BLUE);
    paint.setAlpha(50);
    canvas.drawRect((getWidth()/2-240)+10,(getHeight()/2-343)+10,(getWidth()/2-240)
+470,(getHeight()/2-343)+675,paint);

    paint.setAlpha(10000);
    paint.setColor(Color.BLUE);

    for (int i=0;i<2;i++) {

```

```

        canvas.drawLine ((getWidth () /2-240) +10+i, (getHeight () /2-343) +10+i, (getWidth
() /2-240) +10+i, (getHeight () /2-343) +675-i, paint);
        canvas.drawLine ((getWidth () /2-240) +10+i, (getHeight () /2-343) +675-i, (getWidth
() /2-240) +470-i, (getHeight () /2-343) +675-i, paint);
        canvas.drawLine ((getWidth () /2-240) +470-i, (getHeight () /2-343) +675-i, (getWidth
() /2-240) +470-i, (getHeight () /2-343) +10+i, paint);
        canvas.drawLine ((getWidth () /2-240) +470-i, (getHeight () /2-343) +10+i, (getWidth
() /2-240) +10+i, (getHeight () /2-343) +10+i, paint);
    }
    paint.setColor (Color.BLUE);
    paint.setTextSize (25.0f);
    canvas.drawText (" 【 3 の倍数のトランプカード】 ", (getWidth () /2-240) +100-36+10,
(getHeight () /2-343) +100, paint);

```

```

    if (MainActivity.ritsu != 0) {
        a=(float) 0.7*320/MainActivity.ritsu;           //----- < 画像の拡大・縮小の横の倍率を指定する >
        b=(float) 0.7*320/MainActivity.ritsu;           //----- < 画像の拡大・縮小の縦の倍率を指定する >
    }
    else {
        a=(float) 1.0;
        b=(float) 1.0;
    }

```

```

Matrix Mat = new Matrix (); //-----***
Mat.postScale (a, b);       //-----***

```

```

Bitmap bitmap101 = Bitmap.createBitmap ( //-----***
    bitmap1,0,0, //-----***
    bitmap1.getWidth (), //-----***
    bitmap1.getHeight (), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap102 = Bitmap.createBitmap ( //-----***
    bitmap2,0,0, //-----***
    bitmap2.getWidth (), //-----***
    bitmap2.getHeight (), //-----***
    Mat,true //-----***
); //-----***

```

```

); //-----***

Bitmap bitmap103 = Bitmap.createBitmap( //-----***
    bitmap3,0,0, //-----***
    bitmap3.getWidth(), //-----***
    bitmap3.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap104 = Bitmap.createBitmap( //-----***
    bitmap4,0,0, //-----***
    bitmap4.getWidth(), //-----***
    bitmap4.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap105 = Bitmap.createBitmap( //-----***
    bitmap5,0,0, //-----***
    bitmap5.getWidth(), //-----***
    bitmap5.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap106 = Bitmap.createBitmap( //-----***
    bitmap6,0,0, //-----***
    bitmap6.getWidth(), //-----***
    bitmap6.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap107 = Bitmap.createBitmap( //-----***
    bitmap7,0,0, //-----***
    bitmap7.getWidth(), //-----***
    bitmap7.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap108 = Bitmap.createBitmap( //-----***
    bitmap8,0,0, //-----***
    bitmap8.getWidth(), //-----***

```

```

        bitmap8.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap109 = Bitmap.createBitmap( //-----***
        bitmap9,0,0, //-----***
        bitmap9.getWidth(), //-----***
        bitmap9.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap110 = Bitmap.createBitmap( //-----***
        bitmap10,0,0, //-----***
        bitmap10.getWidth(), //-----***
        bitmap10.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap111 = Bitmap.createBitmap( //-----***
        bitmap11,0,0, //-----***
        bitmap11.getWidth(), //-----***
        bitmap11.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap112 = Bitmap.createBitmap( //-----***
        bitmap12,0,0, //-----***
        bitmap12.getWidth(), //-----***
        bitmap12.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap113 = Bitmap.createBitmap( //-----***
        bitmap13,0,0, //-----***
        bitmap13.getWidth(), //-----***
        bitmap13.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap114 = Bitmap.createBitmap( //-----***

```

```

        bitmap14,0,0, //-----***
        bitmap14.getWidth(), //-----***
        bitmap14.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap15 = Bitmap.createBitmap( //-----***
        bitmap15,0,0, //-----***
        bitmap15.getWidth(), //-----***
        bitmap15.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap16 = Bitmap.createBitmap( //-----***
        bitmap16,0,0, //-----***
        bitmap16.getWidth(), //-----***
        bitmap16.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap17 = Bitmap.createBitmap( //-----***
        bitmap17,0,0, //-----***
        bitmap17.getWidth(), //-----***
        bitmap17.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap18 = Bitmap.createBitmap( //-----***
        bitmap18,0,0, //-----***
        bitmap18.getWidth(), //-----***
        bitmap18.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap19 = Bitmap.createBitmap( //-----***
        bitmap19,0,0, //-----***
        bitmap19.getWidth(), //-----***
        bitmap19.getHeight(), //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap120 = Bitmap.createBitmap( //-----***
    bitmap20,0,0, //-----***
    bitmap20.getWidth(), //-----***
    bitmap20.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap121 = Bitmap.createBitmap( //-----***
    bitmap21,0,0, //-----***
    bitmap21.getWidth(), //-----***
    bitmap21.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap122 = Bitmap.createBitmap( //-----***
    bitmap22,0,0, //-----***
    bitmap22.getWidth(), //-----***
    bitmap22.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap123 = Bitmap.createBitmap( //-----***
    bitmap23,0,0, //-----***
    bitmap23.getWidth(), //-----***
    bitmap23.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap124 = Bitmap.createBitmap( //-----***
    bitmap24,0,0, //-----***
    bitmap24.getWidth(), //-----***
    bitmap24.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap125 = Bitmap.createBitmap( //-----***
    bitmap25,0,0, //-----***
    bitmap25.getWidth(), //-----***
    bitmap25.getHeight(), //-----***

```



```

        Mat,true //-----***
); //-----***

Bitmap bitmap126 = Bitmap.createBitmap( //-----***
    bitmap26,0,0, //-----***
    bitmap26.getWidth(), //-----***
    bitmap26.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap127 = Bitmap.createBitmap( //-----***
    bitmap27,0,0, //-----***
    bitmap27.getWidth(), //-----***
    bitmap27.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap128 = Bitmap.createBitmap( //-----***
    bitmap28,0,0, //-----***
    bitmap28.getWidth(), //-----***
    bitmap28.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap129 = Bitmap.createBitmap( //-----***
    bitmap29,0,0, //-----***
    bitmap29.getWidth(), //-----***
    bitmap29.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap130 = Bitmap.createBitmap( //-----***
    bitmap30,0,0, //-----***
    bitmap30.getWidth(), //-----***
    bitmap30.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap131 = Bitmap.createBitmap( //-----***
    bitmap31,0,0, //-----***

```

```

        bitmap31.getWidth(),      //-----***
        bitmap31.getHeight(),    //-----***
        Mat,true //-----***
); //-----***

```

```

Bitmap bitmap132 = Bitmap.createBitmap( //-----***
    bitmap32,0,0, //-----***
    bitmap32.getWidth(), //-----***
    bitmap32.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap133 = Bitmap.createBitmap( //-----***
    bitmap33,0,0, //-----***
    bitmap33.getWidth(), //-----***
    bitmap33.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap134 = Bitmap.createBitmap( //-----***
    bitmap34,0,0, //-----***
    bitmap34.getWidth(), //-----***
    bitmap34.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap135 = Bitmap.createBitmap( //-----***
    bitmap35,0,0, //-----***
    bitmap35.getWidth(), //-----***
    bitmap35.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```

Bitmap bitmap136 = Bitmap.createBitmap( //-----***
    bitmap36,0,0, //-----***
    bitmap36.getWidth(), //-----***
    bitmap36.getHeight(), //-----***
    Mat,true //-----***
); //-----***

```

```
Bitmap bitmap137 = Bitmap.createBitmap( //-----***
    bitmap37,0,0, //-----***
    bitmap37.getWidth(), //-----***
    bitmap37.getHeight(), //-----***
    Mat,true //-----***
); //-----***
```

```
Bitmap bitmap138 = Bitmap.createBitmap( //-----***
    bitmap38,0,0, //-----***
    bitmap38.getWidth(), //-----***
    bitmap38.getHeight(), //-----***
    Mat,true //-----***
); //-----***
```

```
Bitmap bitmap139 = Bitmap.createBitmap( //-----***
    bitmap39,0,0, //-----***
    bitmap39.getWidth(), //-----***
    bitmap39.getHeight(), //-----***
    Mat,true //-----***
); //-----***
```

```
Bitmap bitmap140 = Bitmap.createBitmap( //-----***
    bitmap40,0,0, //-----***
    bitmap40.getWidth(), //-----***
    bitmap40.getHeight(), //-----***
    Mat,true //-----***
); //-----***
```

```
Bitmap bitmap141 = Bitmap.createBitmap( //-----***
    bitmap41,0,0, //-----***
    bitmap41.getWidth(), //-----***
    bitmap41.getHeight(), //-----***
    Mat,true //-----***
); //-----***
```

```
Bitmap bitmap142 = Bitmap.createBitmap( //-----***
    bitmap42,0,0, //-----***
    bitmap42.getWidth(), //-----***
    bitmap42.getHeight(), //-----***
    Mat,true //-----***
```

```

); //-----***

Bitmap bitmap143 = Bitmap.createBitmap( //-----***
    bitmap43,0,0, //-----***
    bitmap43.getWidth(), //-----***
    bitmap43.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap144 = Bitmap.createBitmap( //-----***
    bitmap44,0,0, //-----***
    bitmap44.getWidth(), //-----***
    bitmap44.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap145 = Bitmap.createBitmap( //-----***
    bitmap45,0,0, //-----***
    bitmap45.getWidth(), //-----***
    bitmap45.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap146 = Bitmap.createBitmap( //-----***
    bitmap46,0,0, //-----***
    bitmap46.getWidth(), //-----***
    bitmap46.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap147 = Bitmap.createBitmap( //-----***
    bitmap47,0,0, //-----***
    bitmap47.getWidth(), //-----***
    bitmap47.getHeight(), //-----***
    Mat,true //-----***
); //-----***

Bitmap bitmap148 = Bitmap.createBitmap( //-----***
    bitmap48,0,0, //-----***
    bitmap48.getWidth(), //-----***

```

```

        bitmap48.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap149 = Bitmap.createBitmap( //-----***
        bitmap49,0,0, //-----***
        bitmap49.getWidth(), //-----***
        bitmap49.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap150 = Bitmap.createBitmap( //-----***
        bitmap50,0,0, //-----***
        bitmap50.getWidth(), //-----***
        bitmap50.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap151 = Bitmap.createBitmap( //-----***
        bitmap51,0,0, //-----***
        bitmap51.getWidth(), //-----***
        bitmap51.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

    Bitmap bitmap152 = Bitmap.createBitmap( //-----***
        bitmap52,0,0, //-----***
        bitmap52.getWidth(), //-----***
        bitmap52.getHeight(), //-----***
        Mat,true //-----***
    ); //-----***

```

```

    if (bitmap101 != null && bitmap102 != null && bitmap103 != null && bitmap104 !=
    null && bitmap105 != null && bitmap106 != null && bitmap107 != null && bitmap108 != null
    && bitmap109 != null && bitmap110 != null && bitmap111 != null && bitmap112 != null &&
    bitmap113 != null && bitmap114 != null && bitmap115 != null && bitmap116 != null &&
    bitmap117 != null && bitmap118 != null && bitmap119 != null && bitmap120 != null &&
    bitmap121 != null && bitmap122 != null && bitmap123 != null && bitmap124 != null &&
    bitmap125 != null && bitmap126 != null && bitmap127 != null && bitmap128 != null &&

```

```

bitmap129 != null && bitmap130 != null && bitmap131 != null && bitmap132 != null &&
bitmap133 != null && bitmap134 != null && bitmap135 != null && bitmap136 != null &&
bitmap137 != null && bitmap138 != null && bitmap139 != null && bitmap140 != null &&
bitmap141 != null && bitmap142 != null && bitmap143 != null && bitmap144 != null &&
bitmap145 != null && bitmap146 != null && bitmap147 != null && bitmap148 != null &&
bitmap149 != null && bitmap150 != null && bitmap151 != null && bitmap152 != null) {

```

```

    ct++;
    r=(int) (1+52*Math.random());

    if (r==1) {
        canvas.drawBitmap(bitmap101,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
    }
    else if (r==2) {
        canvas.drawBitmap(bitmap102,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
    }
    else if (r==3) {
        canvas.drawBitmap(bitmap103,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
        d++;
    }
    else if (r==4) {
        canvas.drawBitmap(bitmap104,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
    }
    else if (r==5) {
        canvas.drawBitmap(bitmap105,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
    }
    else if (r==6) {
        canvas.drawBitmap(bitmap106,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
        d++;
    }
    else if (r==7) {
        canvas.drawBitmap(bitmap107,(getWidth()/2-240)+210-10,(getHeight()/2-343)+150-10,paint);
    }

```

```

else if (r==8) {
    canvas.drawBitmap(bitmap108,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==9) {
    canvas.drawBitmap(bitmap109,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    d++;
}
else if (r==10) {
    canvas.drawBitmap(bitmap110,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==11) {
    canvas.drawBitmap(bitmap111,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==12) {
    canvas.drawBitmap(bitmap112,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    d++;
}
else if (r==13) {
    canvas.drawBitmap(bitmap113,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==14) {
    canvas.drawBitmap(bitmap114,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==15) {
    canvas.drawBitmap(bitmap115,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
}
else if (r==16) {
    canvas.drawBitmap(bitmap116,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    d++;
}
else if (r==17) {

```

```

        canvas.drawBitmap(bitmap117,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==18) {
        canvas.drawBitmap(bitmap118,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==19) {
        canvas.drawBitmap(bitmap119,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==20) {
        canvas.drawBitmap(bitmap120,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==21) {
        canvas.drawBitmap(bitmap121,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==22) {
        canvas.drawBitmap(bitmap122,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==23) {
        canvas.drawBitmap(bitmap123,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==24) {
        canvas.drawBitmap(bitmap124,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==25) {
        canvas.drawBitmap(bitmap125,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==26) {
        canvas.drawBitmap(bitmap126,(getWidth () /2-240) +210-10,(getHeight ()

```



```

/2-343)+150-10,paint);
    }
    else if (r==27) {
        canvas.drawBitmap(bitmap127,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==28) {
        canvas.drawBitmap(bitmap128,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==29) {
        canvas.drawBitmap(bitmap129,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==30) {
        canvas.drawBitmap(bitmap130,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==31) {
        canvas.drawBitmap(bitmap131,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==32) {
        canvas.drawBitmap(bitmap132,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==33) {
        canvas.drawBitmap(bitmap133,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==34) {
        canvas.drawBitmap(bitmap134,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
    }
    else if (r==35) {
        canvas.drawBitmap(bitmap135,(getWidth()/2-240)+210-10,(getHeight()
/2-343)+150-10,paint);
        d++;

```

```

    }
    else if (r==36) {
        canvas.drawBitmap(bitmap136,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==37) {
        canvas.drawBitmap(bitmap137,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==38) {
        canvas.drawBitmap(bitmap138,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==39) {
        canvas.drawBitmap(bitmap139,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==40) {
        canvas.drawBitmap(bitmap140,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==41) {
        canvas.drawBitmap(bitmap141,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==42) {
        canvas.drawBitmap(bitmap142,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
        d++;
    }
    else if (r==43) {
        canvas.drawBitmap(bitmap143,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==44) {
        canvas.drawBitmap(bitmap144,(getWidth () /2-240) +210-10,(getHeight ()
/2-343)+150-10,paint);
    }
    else if (r==45) {

```

```

        canvas.drawBitmap(bitmap145, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
        d++;
    }
    else if (r==46) {
        canvas.drawBitmap(bitmap146, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
    }
    else if (r==47) {
        canvas.drawBitmap(bitmap147, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
    }
    else if (r==48) {
        canvas.drawBitmap(bitmap148, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
        d++;
    }
    else if (r==49) {
        canvas.drawBitmap(bitmap149, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
    }
    else if (r==50) {
        canvas.drawBitmap(bitmap150, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
    }
    else if (r==51) {
        canvas.drawBitmap(bitmap151, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
        d++;
    }
    else if (r==52) {
        canvas.drawBitmap(bitmap152, (getWidth () /2-240) +210-10, (getHeight ()
/2-343)+150-10,paint) ;
    }
}

paint.setColor(Color.BLACK);
paint.setTextSize(20.0f);
canvas.drawText("引いた 3 の倍数のカードの枚数 = "+d, (getWidth()/2-240)+70,
(getHeight()/2-343)+300, paint);

```

```

        canvas.drawText("引いた全てのカードの枚数 = "+ct, (getWidth()/2-240)+70,
(getHeight()/2-343)+340, paint);
        paint.setColor(Color.BLUE);
        canvas.drawText("3の倍数のカードを引いた割合 = "+((float)(d)/(float)(ct)),
(getWidth()/2-240)+30, (getHeight()/2-343)+400, paint);
        paint.setColor(Color.BLACK);
        canvas.drawText("3の倍数のカードを引く理論上の割合 ", (getWidth()/2-240)
+30, (getHeight()/2-343)+440, paint);
        canvas.drawText("= 16/52 = 0.30769231", (getWidth()/2-240)+240, (getHeight()
/2-343)+470, paint);

        paint.setColor(Color.BLACK);
        paint.setTextSize(19.0f);
        canvas.drawText("※ 画面を5回タッチすると自動になります。", (getWidth()
/2-240)+50-20, (getHeight()/2-343)+520, paint);
        canvas.drawText("※ 画面をタッチすると自動が止まります。", (getWidth()/2-240)
+50-20, (getHeight()/2-343)+550, paint);
        canvas.drawText("※ 更に画面をタッチすると初期化されます。", (getWidth()
/2-240)+50-20, (getHeight()/2-343)+580, paint);
        canvas.drawText("※ 画面が暗くなったらタイトルバーをタッチ!", (getWidth()
/2-240)+50-20, (getHeight()/2-343)+610, paint);

        paint.setColor(Color.BLUE);
        paint.setTextSize(19.0f);
        canvas.drawText("Copyright (C) .K.Niwa 2019.11.23", (getWidth()/2-240)+100,
(getHeight()/2-343)+650, paint);

        if (flag>=5) {
            invalidate();
        }
    }

    private void init(Context context) {
        Resources res = context.getResources();
        bitmap1 = BitmapFactory.decodeResource(res, R.drawable.d01);
        bitmap2 = BitmapFactory.decodeResource(res, R.drawable.d02);
        bitmap3 = BitmapFactory.decodeResource(res, R.drawable.d03);
        bitmap4 = BitmapFactory.decodeResource(res, R.drawable.d04);
        bitmap5 = BitmapFactory.decodeResource(res, R.drawable.d05);
        bitmap6 = BitmapFactory.decodeResource(res, R.drawable.d06);
    }
}

```

```
bitmap7 = BitmapFactory.decodeResource (res, R.drawable.d07);  
bitmap8 = BitmapFactory.decodeResource (res, R.drawable.d08);  
bitmap9 = BitmapFactory.decodeResource (res, R.drawable.d09);  
bitmap10 = BitmapFactory.decodeResource (res, R.drawable.d10);  
bitmap11 = BitmapFactory.decodeResource (res, R.drawable.d11);  
bitmap12 = BitmapFactory.decodeResource (res, R.drawable.d12);  
bitmap13 = BitmapFactory.decodeResource (res, R.drawable.d13);
```

```
bitmap14 = BitmapFactory.decodeResource (res, R.drawable.h01);  
bitmap15 = BitmapFactory.decodeResource (res, R.drawable.h02);  
bitmap16 = BitmapFactory.decodeResource (res, R.drawable.h03);  
bitmap17 = BitmapFactory.decodeResource (res, R.drawable.h04);  
bitmap18 = BitmapFactory.decodeResource (res, R.drawable.h05);  
bitmap19 = BitmapFactory.decodeResource (res, R.drawable.h06);  
bitmap20 = BitmapFactory.decodeResource (res, R.drawable.h07);  
bitmap21 = BitmapFactory.decodeResource (res, R.drawable.h08);  
bitmap22 = BitmapFactory.decodeResource (res, R.drawable.h09);  
bitmap23 = BitmapFactory.decodeResource (res, R.drawable.h10);  
bitmap24 = BitmapFactory.decodeResource (res, R.drawable.h11);  
bitmap25 = BitmapFactory.decodeResource (res, R.drawable.h12);  
bitmap26 = BitmapFactory.decodeResource (res, R.drawable.h13);
```

```
bitmap27 = BitmapFactory.decodeResource (res, R.drawable.m01);  
bitmap28 = BitmapFactory.decodeResource (res, R.drawable.m02);  
bitmap29 = BitmapFactory.decodeResource (res, R.drawable.m03);  
bitmap30 = BitmapFactory.decodeResource (res, R.drawable.m04);  
bitmap31 = BitmapFactory.decodeResource (res, R.drawable.m05);  
bitmap32 = BitmapFactory.decodeResource (res, R.drawable.m06);  
bitmap33 = BitmapFactory.decodeResource (res, R.drawable.m07);  
bitmap34 = BitmapFactory.decodeResource (res, R.drawable.m08);  
bitmap35 = BitmapFactory.decodeResource (res, R.drawable.m09);  
bitmap36 = BitmapFactory.decodeResource (res, R.drawable.m10);  
bitmap37 = BitmapFactory.decodeResource (res, R.drawable.m11);  
bitmap38 = BitmapFactory.decodeResource (res, R.drawable.m12);  
bitmap39 = BitmapFactory.decodeResource (res, R.drawable.m13);
```

```
bitmap40 = BitmapFactory.decodeResource (res, R.drawable.s01);  
bitmap41 = BitmapFactory.decodeResource (res, R.drawable.s02);  
bitmap42 = BitmapFactory.decodeResource (res, R.drawable.s03);  
bitmap43 = BitmapFactory.decodeResource (res, R.drawable.s04);
```

```

        bitmap44 = BitmapFactory.decodeResource (res, R.drawable.s05);
        bitmap45 = BitmapFactory.decodeResource (res, R.drawable.s06);
        bitmap46 = BitmapFactory.decodeResource (res, R.drawable.s07);
        bitmap47 = BitmapFactory.decodeResource (res, R.drawable.s08);
        bitmap48 = BitmapFactory.decodeResource (res, R.drawable.s09);
        bitmap49 = BitmapFactory.decodeResource (res, R.drawable.s10);
        bitmap50 = BitmapFactory.decodeResource (res, R.drawable.s11);
        bitmap51 = BitmapFactory.decodeResource (res, R.drawable.s12);
        bitmap52 = BitmapFactory.decodeResource (res, R.drawable.s13);

        //WindowManager wm = ( WindowManager) context.getSystemService
(Context.WINDOW_SERVICE);
        //Display disp = wm.getDefaultDisplay ();
        //width = disp.getWidth ();
        //height = disp.getHeight ();
    }

    @Override
    public boolean onTouchEvent (MotionEvent event) {
        flag = flag+1;
        flag = flag % 6;

        syoki=syoki+1;
        if (syoki>6) {
            ct=0;           //実験回数カウンター
            d=0;           //3の倍数のカードを引いたカウンター
            flag=0;        //自動識別子
            syoki=0;       //初期化識別子
        }

        invalidate ();
        return false;
    }
}

```

[ 2 ] activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
```

```

< androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <jp.kiyo.wuena.mytoramp.MyToramp
        android:id="@+id/myview1"
        android:layout_height="match_parent"
        android:layout_width="match_parent"/>

</androidx.constraintlayout.widget.ConstraintLayout>

```

[ 3 ] MainActivity.java

/\*

```

-----
        3の倍数のトランプカード
        Android 4.4 (Kit Kat)
        Copyright (C) K.Niwa 2019.12.12
-----

```

\*/

```
package jp.kiyo.wuena.mytoramp;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.os.Bundle;
```

```
import android.util.DisplayMetrics;    //<画像の拡大・縮小に必要なライブラリ>
```

```

import android.app.Activity;
import android.view.Menu;

public class MainActivity extends AppCompatActivity {

    static int ritsu;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        DisplayMetrics metrics = new DisplayMetrics(); // <端末の情報を取得する>
        getWindowManager().getDefaultDisplay().getMetrics(metrics);
        StringBuilder buffer = new StringBuilder();
        buffer.append("densityDpi (ドット数 / インチ) : " + String.valueOf
(metrics.densityDpi) + "¥n");
        ritsu=metrics.densityDpi;
    }
}

```