CODING FOR CALCULATOR APPLICATION

In activity-main.xml

<Relative Layout xmlns:android=http://scheme.android.com/apk/res/android

android:layout_width="match_parent"
android:layout_height="match_parent"
android:paddingLeft="16dp"
android:paddingRight="16dp"

<Button
android:id="@+id/btn9"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="9"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn8"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="8"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn7"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="7"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn6"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="6"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn5"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="5"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="4"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="3"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

```
<Button
android:id="@+id/btn2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="2"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn1"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="1"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn0"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="0"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn+"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="+"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn-"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="-"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn*"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="*"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btn/"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="/"
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Button
android:id="@+id/btnclear"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="clear"
android:textsize="20dp"
android:layout_marginTop="280dp"/>
```

```
<Button
android:id="@+id/btnequal"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="="
android:textsize="20dp"
android:layout_marginTop="280dp"/>

<Textview
android:id="@+id/tvControl"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="300dp"
android:layout_marginTop="200dp"
android:textsize="20dp"/>

<Textview
android:id="@+id/tvResult"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="300dp"
android:layout_marginTop="200dp"
android:textsize="20dp"/>

</Relative Layout>
```

In MainActivity

```
private Button zero;
private Button one;
private Button two;
private Button three;
private Button four;
private Button five;
private Button six;
private Button seven;
private Button eight;
private Button nine;
private Button add;
private Button sub;
private Button mul;
private Button div;
private Button equal;
private Button clear;
private Textview info:
private Textview result;
private final char ADDITION='+';
private final char SUBTRACTION='-';
private final char MULTIPLICATION='*';
private final char DIVISION='/';
private final char EQU='=';
private double val1=Double.NaN;
private double val2;
private char ACTION;

@Override
setUpUIViews();
Zero.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"0");
}

One.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
```

```java
info.setText(info.getText().toString()+"1");
}

Two.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"2");
}

Three.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"3");
}

Four.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"4");
}

Five.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"5");
}

Six.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"6");
}

Seven.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"7");
}

Eight.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"8");
}

Nine.setOnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View V){
info.setText(info.getText().toString()+"9");
}
};

add.setOnCickListener(new View.OnClickListener(){
@Override
Public void onClick(View v){
compute();
ACTION=ADDITION;
Result.setText(String.valueOf(val1)+"+");
Info.setText(null);
}
});

sub.setOnCickListener(new View.OnClickListener(){
@Override
Public void onClick(View v){
compute();
ACTION=SUBTRACTION;
Result.setText(String.valueOf(val1)-"-");
Info.setText(null);
}
});
```

```
mul.setOnCickListener(new View.OnClickListener(){
@Override
Public void onClick(View v){
compute();
ACTION=MULTIPLICATION;
Result.setText(String.valueOf(val1)*"*");
Info.setText(null);
}
});

div.setOnCickListener(new View.OnClickListener(){
@Override
Public void onClick(View v){
compute();
ACTION=DIVISION;
Result.setText(String.valueOf(val1)/"/");
Info.setText(null);
}
});

equal.set OnClickListener(new View.OnClickListener(){
@Override
Public void onClick(View v){
compute();
ACTION=EQU;
Result.setText(result.getText().toString()+String.valueOf(val2)+"="+Sring.valueOf(val1);
Info.setText(null);
});

Clear.setOn
if(info.getText().length()>0){
charSequence name=info.getText().toString();
info.setText(name.subSequence(0,name,length()-1));
}
else{
Val1=Double.NaN;
Val2=Double.NaN;
info.setText(null);
result.setText(null);
}
});
}

Private void setUpUIViews(){
one=(Button)findViewById(R.id.btn1);
two=(Button)findViewById(R.id.btn1);
three=(Button)findViewById(R.id.btn1);
four=(Button)findViewById(R.id.btn1);
five=(Button)findViewById(R.id.btn1);
six=(Button)findViewById(R.id.btn1);
seven=(Button)findViewById(R.id.btn1);
eight=(Button)findViewById(R.id.btn1);
nine=(Button)findViewById(R.id.btn1);
}
Privatevoid compute(){
If(!Double.isNaN(val1)){
Val2=Double.parseDouble(info.getText().toString());

Switch(ACTION){
 case ADDITION:
 val1=val1+val2;
 break;

 case SUBTRACTION:
 val1=val1-val2;
 break;

 case MULTIPLICATION:
 val1=val1*val2;
```

```
   break;

 case DIVISION:
 val1=val1/val2;
 break;

  case EQU:
  break;

}
}
Else{
Val1+Double.parseDouble(info.getText().toString());
}
}
}
```