MOBILE APPLICATION DEVELOPMENT

Lab 3

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BSCS-VII

Contents

Activity 1: Activity Life Cycle

Layout

```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">
```

```xml
    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="52dp"
        android:layout_marginLeft="52dp"
        android:layout_marginTop="60dp"
        android:maxLines="20"
        android:text="TextView"
        android:textSize="18sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Logic Code

```java
package com.example.activitylifecycle;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.Window;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    TextView txt;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txt=findViewById(R.id.textView);
        txt.setText("Application is in creation state");
    }

    @Override
    protected void onStart() {
        super.onStart();
        txt.setText(txt.getText().toString()+"\nApplication is in start state");
    }

    @Override
    protected void onResume() {
        super.onResume();
        txt.setText(txt.getText().toString()+"\nApplication is in resume state");
    }
```

```java
    @Override
    protected void onPause() {
        super.onPause();
        txt.setText(txt.getText().toString()+"\nApplication is in pause state");

    }

    @Override
    protected void onStop() {
        super.onStop();
        txt.setText(txt.getText().toString()+"\nApplication is in stop state");
    }

    @Override
    protected void onRestart() {
        super.onRestart();
        txt.setText(txt.getText().toString()+"\nApplication is in restart state")
;

    }

    @Override
    protected void onDestroy() {
        super.onDestroy();
        txt.setText(txt.getText().toString()+"\nApplication is in destroy state")
;

    }
```

Output

3:05

ActivityLifeCycle
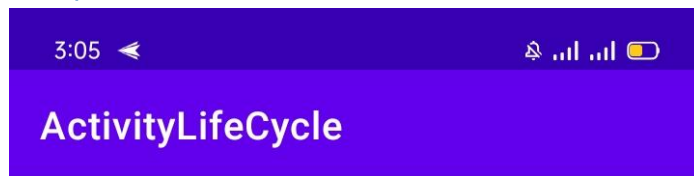
Application is in creation state
Application is in start state
Application is in resume state
Application is in pause state
Application is in resume state
Application is in pause state
Application is in stop state
Application is in restart state
Application is in start state
Application is in resume state

Activity 2: Mood Game

Layout

```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">


    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="horizontal"
        app:layout_constraintTop_toTopOf="parent"
        android:background="#D3D3D3"
        >


        <ImageView
            android:id="@+id/img"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            app:srcCompat="@drawable/hungry"

            />
    </LinearLayout>

    <LinearLayout
        android:id="@+id/linearLayout"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@color/purple_200"
        android:orientation="vertical"
        app:layout_constraintBottom_toBottomOf="parent"
        tools:layout_editor_absoluteX="0dp">

        <TextView
            android:id="@+id/text"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
```

```
                android:text="  I am so hungry"
                android:textColor="@color/white"
                android:textSize="40sp" />

            <Button
                android:id="@+id/btn"
                android:layout_width="200dp"
                android:layout_height="wrap_content"
                android:layout_marginLeft="28dp"
                android:layout_marginBottom="20dp"
                android:text="EAT COOKIE"
                android:textColor="@color/white"
                android:textSize="20sp"
                android:onClick="change"
                />
        </LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>
```

Logic Code

```java
package com.example.mood_game;
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void change(View view) {
        Button btn = (Button) view;
        btn.setText("Done");
        ImageView img = (ImageView) findViewById(R.id.img);
        img.setImageResource(R.drawable.full);
        TextView txt = (TextView) findViewById(R.id.text);
        txt.setText("I am so full");

    }
}
```
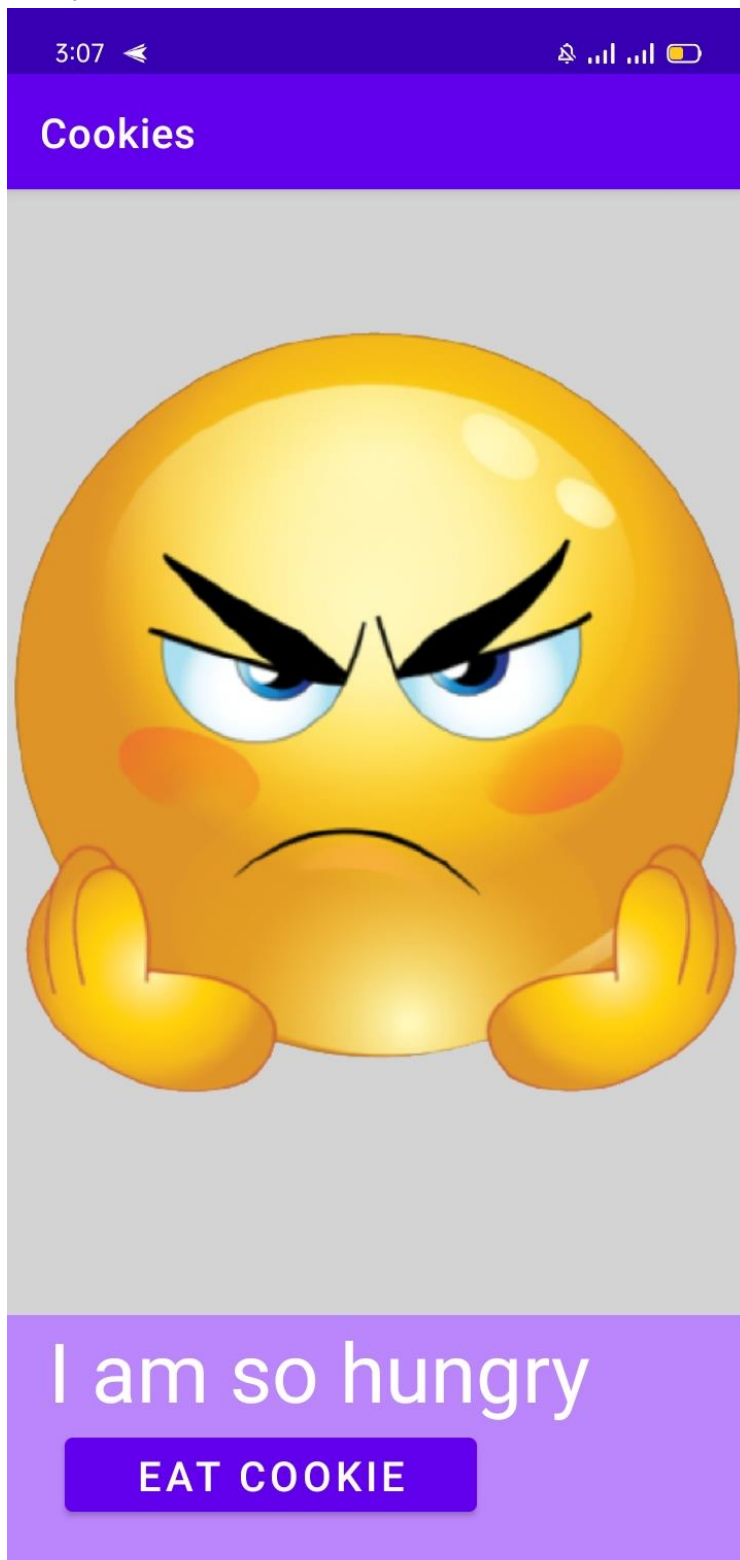
Cookies

I am so full

DONE

Activity 3: Coffee Ordering App

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:background="#F7EAC1"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="match_parent"
        android:layout_height="90dp"
        android:layout_weight="0"
        app:srcCompat="@drawable/coffee2b" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_weight="0"
        android:gravity="center"
        android:textStyle="bold"
        android:textColor="@color/black"
        android:text="choose Toppings :"
        android:textSize="30sp" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0"
        android:gravity="center"
        android:orientation="horizontal">

        <CheckBox
            android:id="@+id/checkBox"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:tag="cream"
```

```xml
                    android:text="Cream" />

        <CheckBox
            android:id="@+id/checkBox2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:tag="chocolate"
            android:text="Chocolate" />
    </LinearLayout>

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_weight="0"
        android:text="Quantity"
        android:textStyle="bold"
        android:textColor="@color/black"
        android:textSize="30sp" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0"
        android:gravity="center"
        android:orientation="horizontal">

        <Button
            android:id="@+id/button2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:onClick="sub"
            android:tag="sub"
            android:text="-" />

        <TextView
            android:id="@+id/textView3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:text="0"
            android:textSize="24sp" />
```

```xml
        <Button
            android:id="@+id/button3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="0"
            android:onClick="add"
            android:tag="add"
            android:text="+" />
    </LinearLayout>

    <Button
        android:id="@+id/button4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_weight="0"
        android:text="Order"
        android:onClick="ShowSummary"
        />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_weight="0"
        android:text="ORDER SUMMARY"
        android:textSize="30sp" />

    <TextView
        android:id="@+id/summary"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_weight="0"
        android:text=""
        android:layout_marginTop="20dp"
        android:maxLines="7"
        android:textSize="20sp" />

</LinearLayout>
```

Logic Code

```java
package com.example.coffee_ordering;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.CheckBox;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    TextView txt;
    TextView summary;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txt=(TextView)findViewById(R.id.textView3);
        summary=(TextView)findViewById(R.id.summary);

    }
    public void add(View view){
        int text=Integer.parseInt(txt.getText().toString())+1;
        txt.setText(""+text);
    }
    public void sub(View view){
        int text=Integer.parseInt(txt.getText().toString())-1;
        if(text>=0)
            txt.setText(""+text);
    }

    public void ShowSummary(View view){
        String cream="no";
        String choc="no";
        int qty=Integer.parseInt(txt.getText().toString());
        float amount=qty*4;
        CheckBox bx1=(CheckBox)findViewById(R.id.checkBox);
        CheckBox bx2=(CheckBox)findViewById(R.id.checkBox2);

        if(bx1.isChecked()) {
            cream = "yes";
            amount+=0.50*qty;
        }
        if(bx2.isChecked()) {
```

```
          choc = "yes";
          amount+=qty;
        }
      summary.setText("Add whipped cream ?"+cream+"\nAdd chocolate ?"+choc+"\nQ
uantity: "+qty
      +"\n\nPrice :$"+amount+"\nTHANK YOU!");
    }
}
```

3:06 ◄

Coffee_ordering

choose Toppings :

☑ Cream ☐ Chocolate

Quantity

| - | 2 | + |

ORDER

ORDER SUMMARY

Add whipped cream ?yes
Add chocolate ?no
Quantity: 2

Price :$9.0
THANK YOU!

Coffee_ordering

choose Toppings :

☑ Cream ☑ Chocolate

Quantity

| - | 3 | + |

ORDER

ORDER SUMMARY

Add whipped cream ?yes
Add chocolate ?yes
Quantity: 4

Price :$22.0
THANK YOU!

Activity 4: Calculator

Layout

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

    <TableRow

        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#DAA04A"
       android:gravity="right"
        >


        <TextView
            android:id="@+id/result"
            android:layout_width="wrap_content"
            android:layout_height="140dp"
            android:text=""
            android:textSize="40sp"
            android:gravity="center"
            />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="wrap_content"

        >


        <Button
            android:id="@+id/AC"
            android:layout_height="100dp"
            android:layout_width="0dp"
            android:layout_weight="2"
            android:background="#03A9F4"
            android:text="AC"
```

```xml
            android:textColor="@color/black"
            android:textSize="30sp"
            app:backgroundTint="#6877CC"
            android:layout_marginRight="5dp"
            android:onClick="clear"
            />

    <Button
            android:id="@+id/modulo"
            android:layout_height="100dp"
            android:layout_width="0dp"
            android:layout_weight="1"
            android:text="%"
            android:textSize="30sp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"

            />

    <Button
            android:id="@+id/divide"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="/"
            android:layout_width="0dp"
            android:textSize="30sp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"
            />
</TableRow>

<TableRow
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="5dp"
    >

    <Button
            android:id="@+id/seven"
            android:layout_height="100dp"
            android:layout_weight="1"
```

```xml
        android:text="7"
        android:layout_width="0dp"
        android:textSize="30sp"
        android:backgroundTint="#C0C0C0"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"
        />
<Button
        android:id="@+id/eight"
        android:backgroundTint="#C0C0C0"

        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="8"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"
        />

<Button
        android:id="@+id/nine"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="9"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:backgroundTint="#C0C0C0"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"
        />


<Button
        android:id="@+id/multiply"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="*"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:backgroundTint="#C0C0C0"
```

```
                android:textColor="@color/black"
                android:layout_marginRight="5dp"
                android:onClick="number"


                />



    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="5dp"
        >

        <Button
            android:id="@+id/four"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="4"
            android:layout_width="0dp"
            android:textSize="30sp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"
            />
        <Button
            android:id="@+id/five"
            android:backgroundTint="#C0C0C0"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="5"
            android:textSize="30sp"
            android:layout_width="0dp"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"
            />

        <Button
            android:id="@+id/six"
            android:layout_height="100dp"
            android:layout_weight="1"
```

```xml
            android:text="6"
            android:textSize="30sp"
            android:layout_width="0dp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"
            />


    <Button
            android:id="@+id/sub"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="-"
            android:textSize="30sp"
            android:layout_width="0dp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"

            />


</TableRow>

<TableRow
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="5dp"
        >

    <Button
            android:id="@+id/one"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="1"
            android:layout_width="0dp"
            android:textSize="30sp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
```

```xml
        android:onClick="number"
        />
    <Button
        android:id="@+id/two"
        android:backgroundTint="#C0C0C0"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="2"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"
        />

    <Button
        android:id="@+id/three"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="3"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:backgroundTint="#C0C0C0"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"
        />



    <Button
        android:id="@+id/plus"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="+"
        android:textSize="30sp"
        android:layout_width="0dp"
        android:backgroundTint="#C0C0C0"
        android:textColor="@color/black"
        android:layout_marginRight="5dp"
        android:onClick="number"

        />
```

```xml
        </TableRow>


    <TableRow
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="5dp"
        >

        <Button
            android:id="@+id/zero"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="0"
            android:layout_width="0dp"
            android:textSize="30sp"
            android:backgroundTint="#C0C0C0"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            android:onClick="number"
            />
        <Button
            android:id="@+id/equal"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="="
            android:textSize="30sp"
            android:layout_width="0dp"
            android:textColor="@color/black"
            android:layout_marginRight="5dp"
            app:backgroundTint="#6877CC"
            android:onClick="result"

            />


    </TableRow>

</TableLayout>
```

Logic Code

```java
package com.example.calculator;
import java.util.Stack;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    TextView rs;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        rs=(TextView)findViewById(R.id.result);
    }
    public void number(View view){
        if(rs.getText().equals("Invalid Expression"))
            rs.setText("");
        Button btn=(Button)view;
        String text=rs.getText().toString()+btn.getText();
        rs.setText(text);
    }
    public void result(View view){

            String exp=rs.getText().toString().replace("%","*1/100*");
            try {
                rs.setText("" + evaluatePostfix(infixToPostfix(exp)));
            }
            catch (Exception e){
                rs.setText("Invalid Expression");

            }
    }
    public void clear(View view){
        rs.setText("");
    }

    public int Prec(char ch)
```

```java
{
    switch (ch)
    {
        case '+':
        case '-':
            return 1;

        case '*':
        case '/':
            return 2;


    }
    return -1;
}
public String infixToPostfix(String exp)
{
    String result = "";

      Stack<Character> stack = new Stack<>();

    for (int i = 0; i<exp.length(); ++i)
    {
        char c = exp.charAt(i);
        if (Character.isDigit(c))
            result+= c;

        else // an operator is encountered
        {   result+=" ";
            while (!stack.isEmpty() && Prec(c)
                    <= Prec(stack.peek()))
                result += stack.pop();


            stack.push(c);
        }

    }


    while (!stack.isEmpty()){
        result += stack.pop();
    }
    return result;
}
```

```java
public  float evaluatePostfix(String exp)
{
    //create a stack
    Stack<Float> stack = new Stack<>();
    String d="";
    // Scan all characters on e by one
    for(int i = 0; i < exp.length(); i++)
    {
        char c = exp.charAt(i);

        if(c == ' '){

            if(d.length()>0)
                stack.push(Float.parseFloat(d));
            d="";

        }


        else if(Character.isDigit(c))
            d+=c;



        else
        {
            System.out.println(c);
            if(d.length()>0) {
                stack.push(Float.parseFloat(d));
                d="";
            }
            float val1 = stack.pop();
            float val2 = stack.pop();

            switch(c)
            {
                case '+':
                    stack.push(val2+val1);
                    break;

                case '-':
                    stack.push(val2- val1);
                    break;
```

```
                case '/':
                    stack.push(val2/val1 );
                    break;

                case '*':
                    stack.push(val2*val1);
                    break;


            }
        }
    }

    return stack.pop();
    }
}
```

Output

3:05 ◄

Calculator

96*5

AC	%	/
7	8	9	*
4	5	6	-
1	2	3	+
0		=	

Calculator

480.0

AC	%	/
7	8	9	*
4	5	6	-
1	2	3	+
0		=

Activity 5: Hangman

Layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Hangman"
        android:textSize="36sp"
         />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <ImageView
            android:id="@+id/img"
            android:layout_width="0dp"
            android:layout_height="150dp"
            android:layout_weight="1"
            app:srcCompat="@drawable/hangman0" />

        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="match_parent"
            android:layout_weight="2"
            android:orientation="vertical">

            <TextView
                android:id="@+id/textView5"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="The word:"
                android:textSize="24sp" />
```

```xml
            <TextView
                android:id="@+id/wordview"
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:text="TextView"
                android:textSize="30sp" />
        </LinearLayout>

    </LinearLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <EditText
            android:id="@+id/txt"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_marginStart="10dp"
            android:layout_marginLeft="10dp"
            android:layout_weight="1"
            android:digits="abcdefghijklmnopqrstuvwxyz"
            android:inputType="textPersonName"
            android:maxLength="1" />

        <Button
            android:id="@+id/guess"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_marginStart="20dp"
            android:layout_marginLeft="20dp"
            android:layout_weight="1"
            android:onClick="Guessword"
            android:text="Guess" />

        <Button
            android:id="@+id/New"
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_marginStart="20dp"
            android:layout_marginLeft="20dp"
            android:layout_marginEnd="10dp"
            android:layout_marginRight="10dp"
            android:layout_weight="1"
```

```
            android:onClick="newWord"
            android:text="NEW" />

    </LinearLayout>

    <TextView
        android:id="@+id/guessview"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="You have guessed "
        android:textSize="24sp" />

</LinearLayout>
```

Logic Code

```java
package com.example.hangman;

import androidx.appcompat.app.AppCompatActivity;

import android.graphics.drawable.Drawable;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import java.util.Random;

public class MainActivity extends AppCompatActivity {

    String word;
    TextView guessedword;
    EditText txt;
    ImageView img1;
    String[] imgaddr;
    int imgnum;
    Random rand;
    String guessedwords;
    TextView guessview;
    Button guessBtn;
```

```java
    Button NewBtn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        rand=new Random();
        word=getResources().getStringArray(R.array.words)[rand.nextInt(5441)];
        guessedword=(TextView)findViewById(R.id.wordview);
        guessedword.setText(word.replaceAll(".","?"));
        guessview=(TextView)findViewById(R.id.guessview);
        guessBtn=(Button)findViewById(R.id.guess);
        NewBtn=(Button)findViewById(R.id.New);

        imgaddr= new String[]{
                "@drawable/hangman6",
                "@drawable/hangman5",
                "@drawable/hangman4",
                "@drawable/hangman3",
                "@drawable/hangman2",
                "@drawable/hangman1",
                "@drawable/hangman0"};

        imgnum=0;
        guessedwords="";


    }
    public void Guessword(View view){
        txt=(EditText)findViewById(R.id.txt);
        char[] temp=guessedword.getText().toString().toCharArray();
        if(guessedwords.contains(txt.getText().toString())) {
            Toast.makeText(this,"Already entered",Toast.LENGTH_LONG).show();
            txt.setText("");
            return;
        }

        boolean check=true;
        guessedwords+=txt.getText().toString();
        guessview.setText("You have guessed :"+guessedwords);
        for(int i=0;i<word.length();i++) {
            if (word.charAt(i) == txt.getText().charAt(0)) {
                temp[i] = word.charAt(i);
                check = false;
            }
        }
        txt.setText("");
```

```java
        String str=new String(temp);
        if(str.equals(word)) {
            Toast.makeText(this, "You win", Toast.LENGTH_LONG).show();
            guessBtn.setEnabled(false);
            return;
        }

        guessedword.setText(str);
        if(check){
            if(++imgnum>=7) {
                Toast.makeText(this, "Game Over word is "+word, Toast.LENGTH_LONG
).show();
                guessBtn.setEnabled(false);

                return;
            }
        }

        int imageResource = getResources().getIdentifier(imgaddr[imgnum], null, g
etPackageName());
        img1= (ImageView)findViewById(R.id.img);
        Drawable res = getResources().getDrawable(imageResource);
        img1.setImageDrawable(res);

    }

    public void newWord(View view){
        guessBtn.setEnabled(true);
        guessview.setText("You have guessed : ");
        word=getResources().getStringArray(R.array.words)[rand.nextInt(5441)];
        guessedword.setText(word.replaceAll(".","?"));
        img1.setImageResource(R.drawable.hangman6);
        imgnum=0;
        guessedwords="";

    }

}
```

Android Manifest File

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.hangman">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Hangman">

        <activity android:name=".MainActivity"
            android:configChanges="keyboardHidden|orientation|screenSize|screenLayout"
            >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```
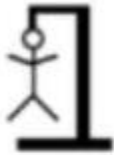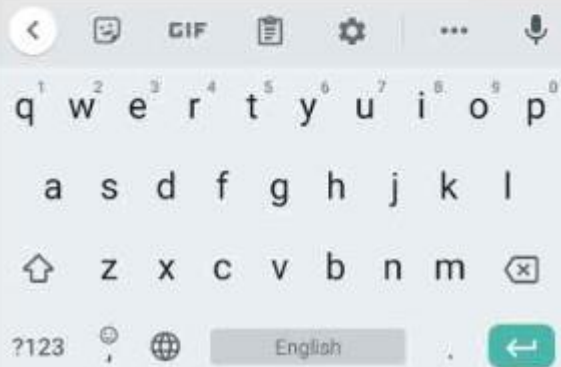
Output

Hangman

Hangman

The word:

????????????

GUESS   **NEW**

You have guessed

Hangman

Hangman

The word:

s??

GUESS   NEW

You have guessed :hnvgdszt

q w e r t y u i o p

a s d f g h j k l

Game Over word is sue

z x c v b n m

?123   English   .
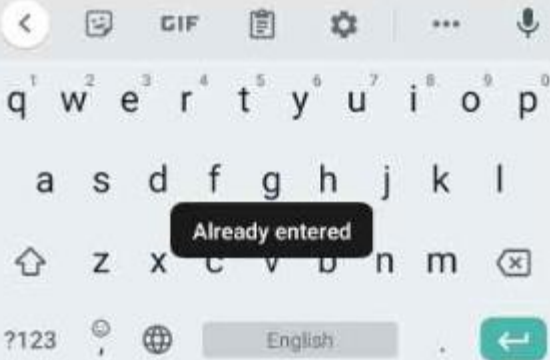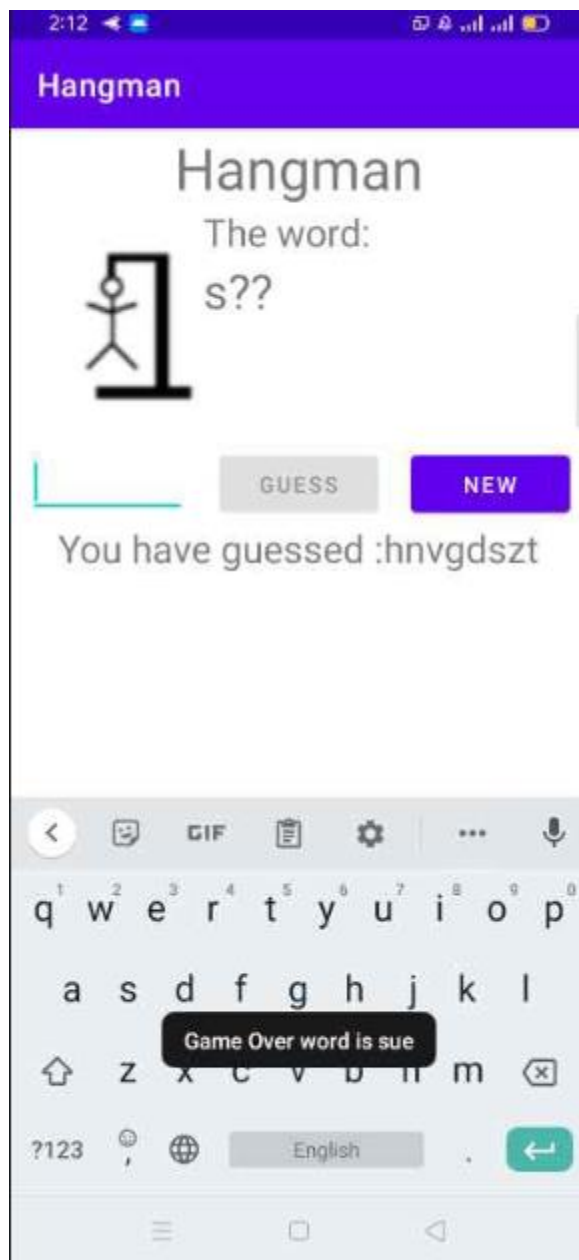
Hangman

Hangman

The word:

prefer

|_____| GUESS NEW

You have guessed :hkpcrfe

You win