Practical File

Mobile Application Development

Bachelor Of Computer Applications

Submitted to:

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1.	Create "hello world" application to display "hello world" in the middle of the screen in the emulator as well as android phone	
2.	Create an android app to display various android lifecycle phases.	
3.	Create a calculator app that performs addition, subtraction, division, and multiplication operation on numbers.	
4.	Write an Android application to convert into different currencies for example, Rupees to dollar	
5.	Write an application to mark the daily route of travel in map.	
6.	Create a spinner application with strings taken from resource directory res/values/strings.xml and on changing the spinner value, image will change. Image is saved in the drawable directory.	
7.	Create an app that uses radio button group which calculates discount on shopping bill amount. Use ediitext to enter bill amount and select one of three radio buttons to determine a discount for 10, 15, or 20 percent.the discount is calculated upon selection of one of the buttons and displayed in a textview control.	
8.	Create a login application to verify username and password. On successful login, redirect to another activity that has a textview to display "welcome user" with logout button. On click of logout button, a dialog should appear with ok and cancel buttons. On click of oK button, go back to the login activity and on click of cancel button, stay on the same activity.	
9.	Create an application to perform the operations of create, insert, delete, view and update, using sqlite database.	
10.	Create an application to pick up any image from the native application gallery and display it on the screen.	
11.	Create an application to take picture using native application.	

Q1. Create Hello Worldapplication to display"Hello World" in themiddle of thescreen in theemulator as well as android phone.

CODE:-

MainActivity.java:

```
package com.example.q1madpractical; import
android.os.Bundle;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity; import
androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat; publicclass MainActivity
extends AppCompatActivity{
    @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }}
```

Activity_main.xml:

```
<?xmlversion="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:id="@+id/main"
    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_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT:

Q2.Create an androidapplication to displayvarious android lifecycle phases.

CODE:-

MainActivity.java:

```
importandroid.support.v7.app.AppCompatActivity; import
android.os.Bundle;
import android.widget.Toast;
publicclass MainActivityextends AppCompatActivity{ @Override
  protectedvoidonCreate(BundlesavedInstanceState){
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    Toasttoast=Toast.makeText(getApplicationContext(),"onCreate Called",
Toast.LENGTH_LONG).show();
  }
  protectedvoidonStart(){ super.onStart();
    Toasttoast=Toast.makeText(getApplicationContext(),"onStart Called", Toast.LENGTH_LONG).show();
  }
  @Override
  protectedvoidonRestart(){ super.onRestart();
    Toasttoast=Toast.makeText(getApplicationContext(),"onRestart Called",
Toast.LENGTH_LONG).show();
  }
  protectedvoidonPause(){
    super.onPause();
    Toasttoast=Toast.makeText(getApplicationContext(),"onPause Called",
Toast.LENGTH_LONG).show();
  }
  protectedvoidonResume(){ super.onResume();
    Toasttoast =Toast.makeText(getApplicationContext(), "onResume Called",
Toast.LENGTH_LONG).show();
  }
  protectedvoidonStop(){
    super.onStop();
    Toasttoast=Toast.makeText(getApplicationContext(),"onStop Called", Toast.LENGTH_LONG).show();
```

```
    }
    protectedvoidonDestroy(){
        super.onDestroy();
        Toasttoast=Toast.makeText(getApplicationContext(),"onDestroy Called",
Toast.LENGTH_LONG).show();
    }
}
```

Activity_main.xml:

```
<?xmlversion="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:id="@+id/main"
    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_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT:

Q3.Createacalculatorappthatperformsaddition, subtraction, division and multiplicationoperationson numbers.

CODE:-

MainActivity.java:

```
package com.example.q3madpractical; import
android.os.Bundle;
importandroid.view.View; import
android.widget.Button; import
android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity; publicclass
MainActivityextends AppCompatActivity{
    private TextView resultTextView;
    private StringBuilder input= new StringBuilder(); @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        resultTextView = findViewById(R.id.resultTextView); Button button1 =
        findViewById(R.id.button1); Button button2 =
        findViewById(R.id.button2); Button button3 =
        findViewById(R.id.button3); Button button4 =
        findViewById(R.id.button4); Button button5 =
        findViewById(R.id.button5); Button button6 =
        findViewById(R.id.button6);
        Button button7 = findViewById(R.id.button7); Button button8 =
        findViewById(R.id.button8); Button button9 =
        findViewById(R.id.button9); Button button0 =
        findViewById(R.id.button0); ButtonbuttonDot=
        findViewById(R.id.buttonDot);
        ButtonbuttonEqual=findViewById(R.id.buttonEqual); Button buttonAdd =
        findViewById(R.id.buttonAdd);
        ButtonbuttonSubtract=findViewById(R.id.buttonSubtract); ButtonbuttonMultiply=
        findViewById(R.id.buttonMultiply); Button buttonDivide =
        findViewById(R.id.buttonDivide); button0.setOnClickListener(new
        View.OnClickListener(){
```

```
    @Override
    publicvoidonClick(View v) { input.append("0");
        resultTextView.setText(input);
    }
});
button1.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("1");
        resultTextView.setText(input.toString());
    }
});
button2.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("2");
        resultTextView.setText(input.toString());
    }
});
button3.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("3");
        resultTextView.setText(input.toString());
    }
});
button4.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("4");
        resultTextView.setText(input.toString());
    }
});
button5.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("5");
        resultTextView.setText(input.toString());
    }
 });
```

```
button6.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("6");
        resultTextView.setText(input.toString());
    }
});
button7.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("7");
        resultTextView.setText(input.toString());
    }
});
button8.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("8");
        resultTextView.setText(input.toString());
    }
});
button9.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append("9");
        resultTextView.setText(input.toString());
    }
});
buttonDot.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) { input.append(".");
        resultTextView.setText(input);
    }
});
buttonAdd.setOnClickListener(new View.OnClickListener() { @Override
    publicvoidonClick(View v) {
        input.append("+");
        resultTextView.setText(input);
    }
});
buttonSubtract.setOnClickListener(new View.OnClickListener() { @Override
```

```
        publicvoidonClick(View v) {
            input.append("-");
            resultTextView.setText(input);
        }
    });
    buttonMultiply.setOnClickListener(new View.OnClickListener(){ @Override
        publicvoidonClick(View v) {
            input.append("*");
            resultTextView.setText(input);
        }
    });

    buttonDivide.setOnClickListener(new View.OnClickListener() { @Override
        publicvoidonClick(View v) { input.append("/");
            resultTextView.setText(input);
        }
    });

    buttonEqual.setOnClickListener(new View.OnClickListener() { @Override
        publicvoidonClick(View v) {
            Stringexpression=input.toString();
            doubleresult=evaluateExpression(expression);
            resultTextView.setText(String.valueOf(result)); input.setLength(0); //
            Clear inputbuffer
        }
    });
  }
private doubleevaluateExpression(String expression) { try {
        return new Object() {
```

```
int pos = -1, ch; void
nextChar(){
    ch =(++pos <expression.length())? expression.charAt(pos) : -1;
}
booleaneat(intcharToEat){ while(ch=='
    ') nextChar(); if (ch == charToEat) {
        nextChar();
        return true;
    }
    return false;
}

doubleparse(){
    nextChar();
    doublex=parseExpression(); if(pos<
    expression.length())
        thrownew RuntimeException("Unexpected:" +(char) ch);
    return x;
}

doubleparseExpression(){ doublex =
    parseTerm(); for (; ; ) {
        if (eat('+')) x += parseTerm();
        else if (eat('-')) x -= parseTerm(); else return x;
    }
}
doubleparseTerm() { doublex=
    parseFactor(); for (; ; ) {
        if (eat('*')) x *= parseFactor();
        else if (eat('/')) x /= parseFactor(); else return x;
    }
}
```

```
            doubleparseFactor() {
                if (eat('+')) return parseFactor(); if (eat('-'))
                return -parseFactor(); double x;
                int startPos = this.pos; if
                (eat('(')) {
                    x = parseExpression(); eat(')');
                } else if ((ch >= '0' CC ch <= '9') || ch == '.') {
                    while ((ch >= '0' CC ch <= '9') || ch == '.') nextChar();
                    x =
                                    Double.parseDouble(expression.substring(startPos,
  this.pos));
                }else{
                    thrownew RuntimeException("Unexpected:" +(char) ch);
                }
                return x;
            }
        }.parse();
      }catch(Exceptione){ return
        Double.NaN;
      }
   }
}
```

Activity_main.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:background="@color/black" android:orientation="vertical"
   android:padding="16dp"
   tools:context=".MainActivity">
   <com.google.android.material.card.MaterialCardView android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content" android:padding="10dp">
    <TextView
        android:id="@+id/resultTextView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:layout_marginBottom="16dp"
        android:gravity="end"
        android:text="0" android:textSize="24sp" />
</com.google.android.material.card.MaterialCardView>
<LinearLayout
    android:layout_width="match_parent" android:layout_height="631dp"
    android:background="@color/black" android:gravity="center"
    android:orientation="vertical">
    <LinearLayout android:layout_width="match_parent"
        android:layout_height="100dp"
        android:layout_marginBottom="8dp"
        android:orientation="horizontal">
        <Button
            android:id="@+id/button1"
            android:layout_width="0dp"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="1" />
        <Button
            android:id="@+id/button2"
            android:layout_width="0dp"
            android:layout_height="100dp"
            android:layout_weight="1"
            android:text="2" /
        <Button
            android:id="@+id/button3"
            android:layout_width="0dp"
```

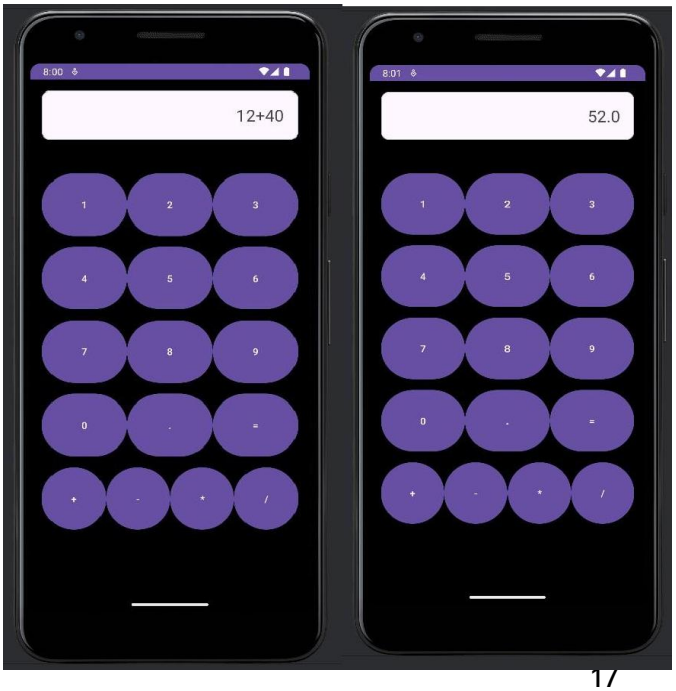
```
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="3" />
</LinearLayout>
<LinearLayout android:layout_width="match_parent"
    android:layout_height="100dp"
    android:layout_marginBottom="8dp"
    android:orientation="horizontal">
    <Button
        android:id="@+id/button4"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="4" />

    <Button
        android:id="@+id/button5"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="5" />

    <Button
        android:id="@+id/button6"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="6" />

</LinearLayout>

<LinearLayout android:layout_width="match_parent"
    android:layout_height="100dp"
```

```
    android:layout_marginBottom="8dp"
    android:orientation="horizontal">

    <Button
        android:id="@+id/button7"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="7" />

    <Button
        android:id="@+id/button8"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="8" />

    <Button
        android:id="@+id/button9"
    android:layout_width="0dp"
    android:layout_height="100dp"
    android:layout_weight="1"
    android:text="9" />

</LinearLayout>

<LinearLayout android:layout_width="match_parent"
    android:layout_height="100dp"
    android:layout_marginBottom="8dp"
    android:orientation="horizontal">
```

```
    <Button
        android:id="@+id/button0"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="0" />

    <Button
        android:id="@+id/buttonDot"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="." />

    <Button
        android:id="@+id/buttonEqual"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
        android:text="=" />

</LinearLayout>

<LinearLayout android:layout_width="match_parent"
    android:layout_height="100dp"
    android:layout_marginBottom="8dp"
    android:orientation="horizontal">

    <Button
        android:id="@+id/buttonAdd"
        android:layout_width="0dp"
        android:layout_height="100dp"
        android:layout_weight="1"
```

```
            android:text="+" />

        <Button

            android:id="@+id/buttonSubtract"

            android:layout_width="0dp"

            android:layout_height="100dp"

            android:layout_weight="1" android:text="-" />

        <Button

            android:id="@+id/buttonMultiply" android:layout_width="0dp"

            android:layout_height="100dp" android:layout_weight="1"

        android:text="*" />


        <Button

            android:id="@+id/buttonDivide"

            android:layout_width="0dp"

            android:layout_height="100dp"

            android:layout_weight="1"

            android:text="/" />

    </LinearLayout>

  </LinearLayout>
</LinearLayout>
```

OUTPUT:



Q4.Writean Androidapplication to convertintodifferent currenciesforexample, Rupees to dollar.

CODE:-

MainActivity.java:

```
package com.example.q4madpractical; import
android.os.Bundle;
importandroid.view.View; import
android.widget.Button; import
android.widget.EditText; import
android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private static finaldouble RUB_RATE= 0.71; // 1 Rupee to Ruble private static finaldouble
    EUR_RATE= 0.012; // 1 Rupee to Euro privatestaticfinaldouble USD_RATE=0.014; // 1
    Rupee to Dollar

    private EditTextrupeesEditText; private Button
    convertButton; private TextView
    rubleTextView; privateTextView
    euroTextView; private TextView
    dollarTextView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState); setContentView(R.layout.activity_main);
        rupeesEditText = findViewById(R.id.rupeesEditText); convertButton =
        findViewById(R.id.convertButton); rubleTextView=
        findViewById(R.id.rubleTextView); euroTextView=
        findViewById(R.id.euroTextView); dollarTextView =
        findViewById(R.id.dollarTextView);
```

```
        convertButton.setOnClickListener(new View.OnClickListener() { @Override
            publicvoidonClick(Viewv) {
                convertCurrency();
            }
        });
    }


    privatevoidconvertCurrency(){ double amount =
Double.parseDouble(rupeesEditText.getText().toString());   double ruble = amount
        * RUB_RATE;
        double euro = amount * EUR_RATE; doubledollar=
        amount* USD_RATE;
        rubleTextView.setText(String.format("%.2f Ruble", ruble)); euroTextView.setText(String.format("%.2f Euro",
        euro)); dollarTextView.setText(String.format("%.2f Dollar", dollar));
    }
}
```

activity_main.xml:

```
<?xmlversion="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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/rupeesEditText" android:layout_width="0dp"
        android:layout_height="wrap_content" android:hint="Enter Rupees"
        android:inputType="numberDecimal"
        app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"  />
    <Button
```

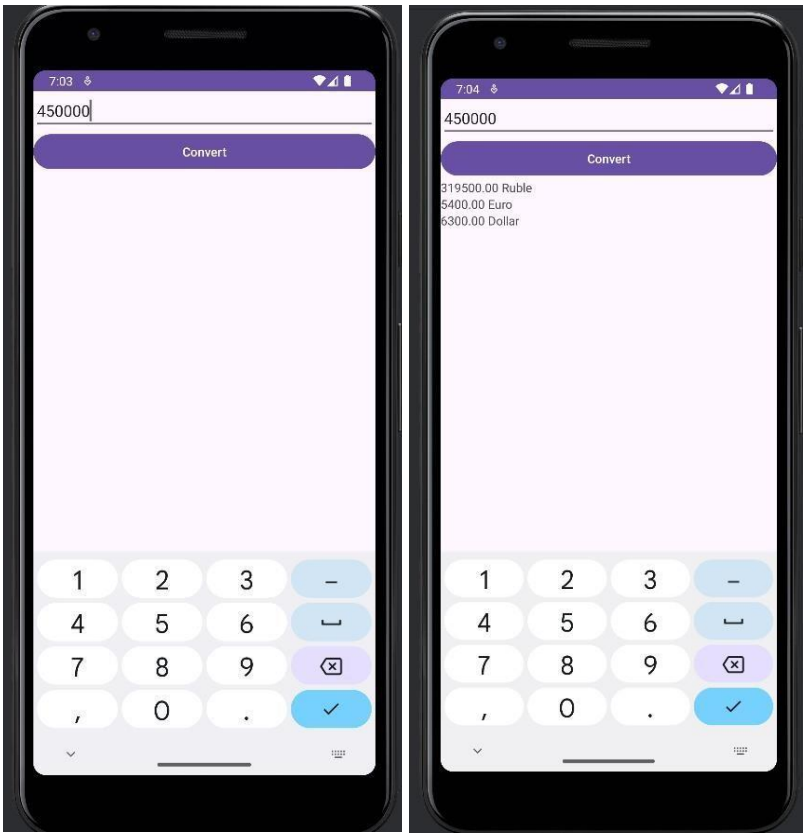
```
    android:id="@+id/convertButton" android:layout_width="0dp"
    android:layout_height="wrap_content" android:text="Convert"
    app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/rupeesEditText"   />

  <TextView
    android:id="@+id/rubleTextView" android:layout_width="0dp"
    android:layout_height="wrap_content"
    app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/convertButton"  />

  <TextView
    android:id="@+id/euroTextView" android:layout_width="0dp"
    android:layout_height="wrap_content"
    app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/rubleTextView"  />

  <TextView
    android:id="@+id/dollarTextView" android:layout_width="0dp"
    android:layout_height="wrap_content"
    app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/euroTextView"  />
</androidx.constraintlayout.widget.ConstraintLayout>
```

AndroidManifest.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:tools="http://schemas.android.com/tools">

  <application
    android:allowBackup="true"
    android:dataExtractionRules="@xml/data_extraction_rules"
```

```
    android:fullBackupContent="@xml/backup_rules" android:icon="@mipmap/ic_launcher"
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportsRtl="true"
    android:theme="@style/Theme.Q4MADpractical" tools:targetApi="31">
    <activity
        android:name=".MainActivity"
        android:exported="true">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />
            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
</application>

</manifest>
```

OUTPUT:



Q5.Writean application to markthedailyrouteoftravel in map.

CODE:-

MainActivity.java:

```
package com.example.travel;


importandroid.content.Intent; import
android.net.Uri;
import android.os.Bundle; import
android.view.View; import
android.widget.EditText; import
android.widget.Toast;


import androidx.activity.EdgeToEdge; import
androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity; import
androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;


publicclass MainActivityextends AppCompatActivity{  String loc="Delhi";
EditText edtloc;  @Override
   protectedvoidonCreate(BundlesavedInstanceState){
      super.onCreate(savedInstanceState);
      EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      edtloc=(EditText)  findViewById(R.id.edtLocation);
```

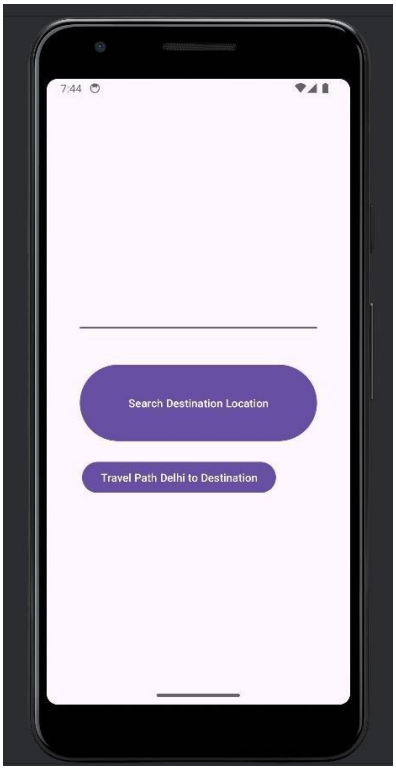
```
Toast.makeText(peekAvailableContext().getApplicationContext(),"Select  Location",Toast.LENGTH_SHORT).show();
    }
public void openMap(View v) { loc =
    edtloc.getText().toString();
    Uriu=android.net.Uri.parse("http://maps.google.com/maps?Cq=" + loc.toString());
    Intenti=newIntent(Intent.ACTION_VIEW,u); v.getContext().startActivity(i);
}
publicvoidTravelPath(Viewview){
        loc=edtloc.getText().toString();
    Uri uri= Uri.parse("https://www.google.co.in/maps/dir/"+"Delhi"+"/"+loc.toString());
    Intenti=newIntent(Intent.ACTION_VIEW,uri);  view.getContext().startActivity(i);
    }
}
```

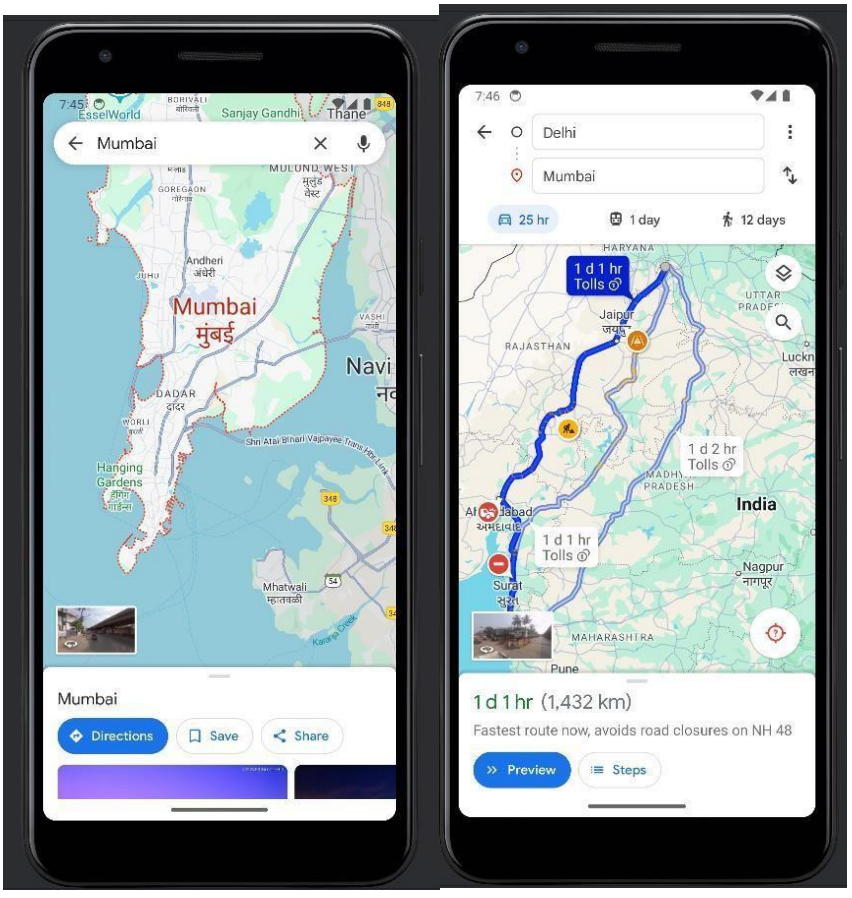
activity_main.xml:

```
<?xmlversion="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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <Button
        android:id="@+id/button" android:layout_width="0dp"
        android:layout_height="0dp" android:layout_marginStart="43dp"
        android:layout_marginEnd="43dp"
        android:layout_marginBottom="19dp" android:onClick="openMap"
        android:text="Search Destination Location"
        app:layout_constraintBottom_toTopOf="@+id/button2" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/edtLocation"  />
    <EditText
```

```
    android:id="@+id/edtLocation" android:layout_width="0dp"
    android:layout_height="0dp" android:layout_marginStart="39dp"
    android:layout_marginTop="198dp"
    android:layout_marginEnd="39dp"
    android:layout_marginBottom="36dp" android:ems="10"
    android:inputType="textPersonName" android:onClick="TravelPath"
    app:layout_constraintBottom_toTopOf="@+id/button" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" />
  <Button
    android:id="@+id/button2" android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="3dp"
    android:layout_marginBottom="245dp"
    android:text="Travel Path Delhi to Destination"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintStart_toStartOf="@+id/button"
    app:layout_constraintTop_toBottomOf="@+id/button" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT:





Q6.Createaspinnerapplicationwithstringstakenfrom resourcedirectory res/values/strings.xmlandonchanging thespinnervalue,imagewillchange. Image issaved in the drawabledirectory.

CODE:-

MainActivity.java:

```
package com.example.q8madpractical;

importandroid.os.Bundle; import
android.view.View;
importandroid.widget.AdapterView; import
android.widget.ImageView; import
android.widget.Spinner;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private Spinner spinner;
    private ImageViewimageView;

    @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        spinner = findViewById(R.id.spinner1); imageView=
        findViewById(R.id.imageView1);

        spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener(){
            @Override
            publicvoidonItemSelected(AdapterView<?>parent, Viewview, int position, long id) {
                switch(position){ case 0:
                        imageView.setImageResource(R.drawable.abc);  break;
```

```
                case 1:
                    imageView.setImageResource(R.drawable.def);  break;
            }
        }

        @Override
        public void onNothingSelected(AdapterView<?> parent) {

        }
    });
  }
}
```

activity_main.xml:

```
<?xmlversion="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:id="@+id/main"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  tools:context=".MainActivity">


  <Spinner
    android:id="@+id/spinner1" android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="128dp" android:entries="@array/img"
    app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"  />

  <ImageView
    android:id="@+id/imageView1"  android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:layout_below="@id/spinner1"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="88dp" android:src="@drawable/abc"
        app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintStart_toStartOf="parent" />

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

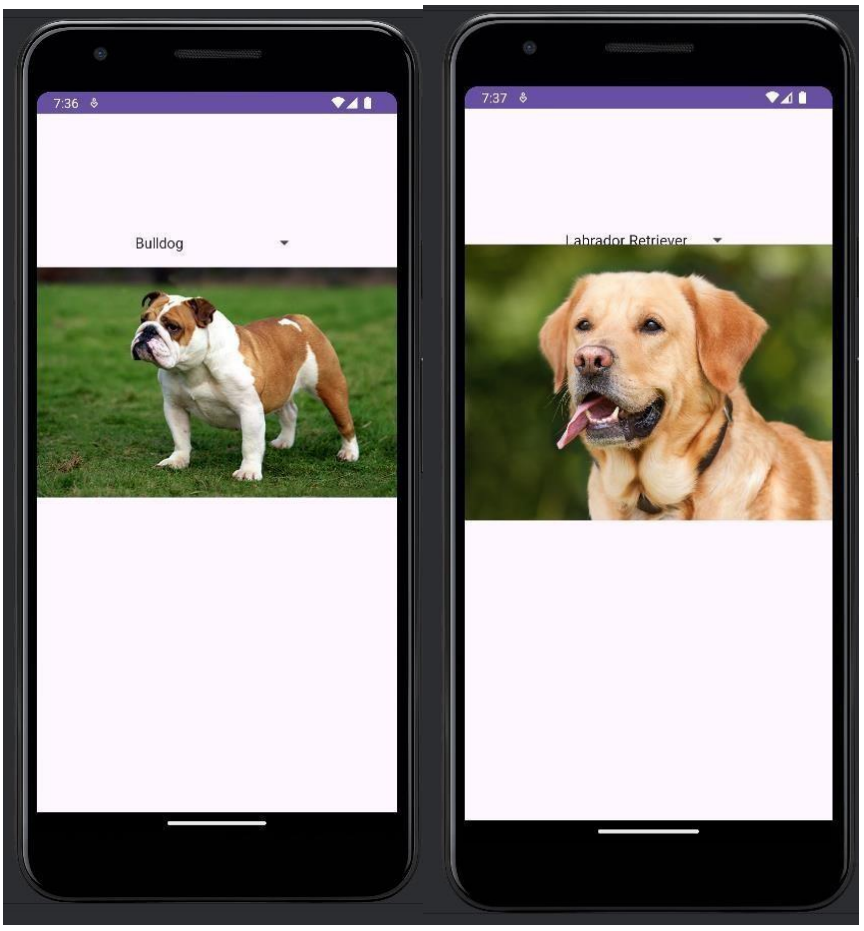
AndroidManifest.xml:

```
  <?xmlversion="1.0" encoding="utf-8"?>
  <manifest xmlns:android="http://schemas.android.com/apk/res/android"
     xmlns:tools="http://schemas.android.com/tools">

     <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules" android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Q8MADpractical" tools:targetApi="31">
        <activity
           android:name=".MainActivity"
           android:exported="true">
           <intent-filter>
              <action android:name="android.intent.action.MAIN" />

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

        </application>
</manifest>
```

strings.xml:

```
<resources>
    <string name="app_name">Practical8</string>
    <string name="hello">Hello World, Tut_2_1Activity!</string>
    <string-arrayname="img">
        <item>Labrador Retriever</item>
        <item>Bulldog</item>
    </string-array>
</resources>
```

OUTPUT:



Q7.Createanappthatuses radio buttongroupwhich calculatesdiscount on shoppingbillamount. Use ediitext toenterbillamountandselectone of three radiobuttons todetermineadiscountfor 10, 15, or 20 percent.the discount is calculatedupon selection of one of the buttonsanddisplayed in a textviewcontrol.

CODE:-

MainActivity.java:

```
package com.example.q9madpractical;

import android.os.Bundle; import
android.widget.Button; import
android.widget.EditText;
import  android.widget.RadioButton;
import android.widget.RadioGroup;
importandroid.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity; import
androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;


public class MainActivity extends AppCompatActivity {
    private EditText billAmountEditText;
    private RadioGroup discountRadioGroup; private TextView
    discountAmountTextView;


    @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
```

```
        setContentView(R.layout.activity_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
        billAmountEditText = findViewById(R.id.billAmountEditText);
        discountRadioGroup = findViewById(R.id.discountRadioGroup); discountAmountTextView =
findViewById(R.id.discountAmountTextView);

        // Setalistener for the radiogroup to calculate discount ButtoncalculateButton=
        findViewById(R.id.calculateButton);  calculateButton.setOnClickListener(v ->
        calculateDiscount());
    }
    privatevoidcalculateDiscount(){ double billAmount
        =
Double.parseDouble(billAmountEditText.getText().toString()); int discountPercentage =
        getSelectedDiscountPercentage();
        int discountAmount = (int) ((billAmount * discountPercentage) / 100);

        discountAmountTextView.setText("Discount Amount:" + discountAmount);
    }

    private int getSelectedDiscountPercentage() {
        int selectedId=discountRadioGroup.getCheckedRadioButtonId(); RadioButton radioButton =
        findViewById(selectedId);

        if (radioButton.getId()== R.id.tenPercentRadioButton){ return 10;
        }elseif(radioButton.getId() ==R.id.fifteenPercentRadioButton) { return 15;
        }elseif(radioButton.getId() ==R.id.twentyPercentRadioButton) { return 20;
        } else {
```

```
        return0;
        }
    }
}
```

activity_main.xml:

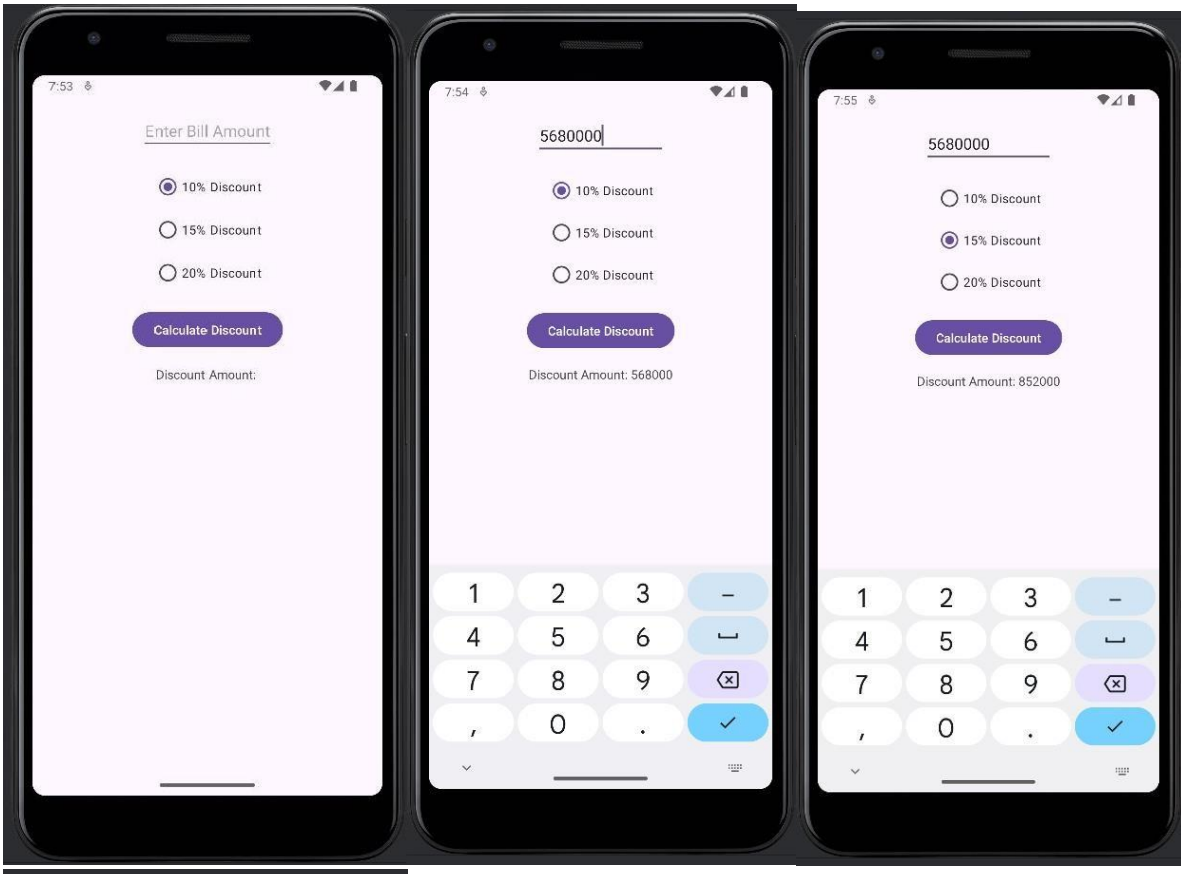
```
<?xmlversion="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
        <EditText
            android:id="@+id/billAmountEditText"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"  android:layout_margin="16dp"
            android:hint="Enter Bill Amount"
            android:inputType="numberDecimal"
            app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"  />

        <RadioGroup
            android:id="@+id/discountRadioGroup"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_margin="16dp"
            app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@id/billAmountEditText">

            <RadioButton
                android:id="@+id/tenPercentRadioButton"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:checked="true" android:text="10% Discount" />
```

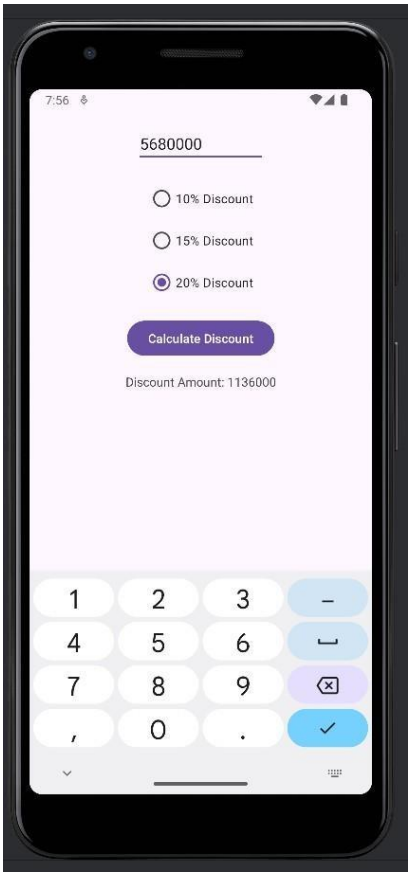
```
        <RadioButton
            android:id="@+id/fifteenPercentRadioButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"  android:text="15%
            Discount" />

        <RadioButton
            android:id="@+id/twentyPercentRadioButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" android:text="20%
            Discount" />
    </RadioGroup>
    <Button
        android:id="@+id/calculateButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="16dp" android:text="Calculate
        Discount" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/discountRadioGroup"  />

    <TextView
        android:id="@+id/discountAmountTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="16dp"  android:text="Discount
        Amount:  "  app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/calculateButton"    />
</androidx.constraintlayout.widget.ConstraintLayout>
```

AndroidManifest.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules" android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Q9MADpractical" tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

OUTPUT:


7:53
Enter Bill Amount
10% Discount
15% Discount
20% Discount
Calculate Discount
Discount Amount:
7:54
5680000
10% Discount
15% Discount
20% Discount
Calculate Discount
Discount Amount: 568000
7:55
5680000
10% Discount
15% Discount
20% Discount
Calculate Discount
Discount Amount: 852000


7:56
5680000
10% Discount
15% Discount
20% Discount
Calculate Discount
Discount Amount: 1136000

Q8. Create a login application to verify username and password. On successful login, redirect to another activity that has a TextView to display "Welcome User" with logout button. On click of logout button, a dialog should appear with ok and cancel buttons. On click of OK button, go back to the login activity and on click of cancel button, stay on the same activity.

CODE:-

MainActivity.java:

```
package com.example.q11madpractical; import
android.content.Intent;
import android.os.Bundle; import
android.view.View; import
android.widget.EditText; import
android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    EditText usr, pswd;

    @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        usr =findViewById(R.id.usr); pswd =
        findViewById(R.id.pass);
    }

    publicvoidloginValid(Viewview){
        String username = usr.getText().toString();
```

```
        String password =pswd.getText().toString(); Boolean isUsr = false,
        isPass = false;

        if (username.isEmpty()) {
            Toast.makeText(this,"Usernamecannot be empty", Toast.LENGTH_SHORT).show();
            isUsr = false;
        }else if (username.contains("")){
            Toast.makeText(this, "Invalid Username", Toast.LENGTH_SHORT).show();
            isUsr = false;
        }else{ isUsr=true;}

        if (password.isEmpty()) {
            Toast.makeText(this,"Passwordcannot be empty",
                    Toast.LENGTH_SHORT).show();
            isPass =false;
        } else if (password.length() < 8) {
            Toast.makeText(this, "Invalid Password",
                    Toast.LENGTH_SHORT).show();
            isPass =false;
        } else{ isPass=true;}

        if (isUsr CC isPass) {
            Intent homePage =new Intent(this, HomePage.class);

            startActivity(homePage); finish();
        }
    }
}
```

activity_main.xml:

```
<?xmlversion="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"
android:layout_margin="10sp"
tools:context=".MainActivity">

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center">
    <EditText
        android:id="@+id/usr"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="50sp"
        android:hint="Enter Username" android:text=""
        app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"  />

    <EditText
        android:id="@+id/pass"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="20sp"
        android:hint="Enter Password"
        android:inputType="textPassword" android:text=""
        app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/usr" />

    <Button android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="20sp" android:onClick="loginValid"
```

```
        android:text="Verify"
        app:layout_constraintEnd_toEndOf="parent" app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/pass" />

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

HomePage.java:

```
package com.example.q11madpractical;



importandroid.content.Intent; import
android.os.Bundle; import
android.view.View;
import android.widget.RelativeLayout;
import androidx.appcompat.app.AppCompatActivity;

public class HomePage extends AppCompatActivity {

    public RelativeLayout modal;

    @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home_page);
        modal = findViewById(R.id.logoutModal);
//        Stringname=getIntent().getStringExtra("name");
//        Toast.makeText(this,"Welcome" +name,
Toast.LENGTH_SHORT).show();
    }

    publicvoidlogoutModal(Viewview){
        modal.setVisibility(view.VISIBLE);
```

```
    }

    publicvoidlogout(Viewview){

        IntentmainActivity=new Intent(this, MainActivity.class); startActivity(mainActivity);
        finish();
    }

    publicvoidcancel(Viewview) { modal.setVisibility(view.GONE);}

}
```

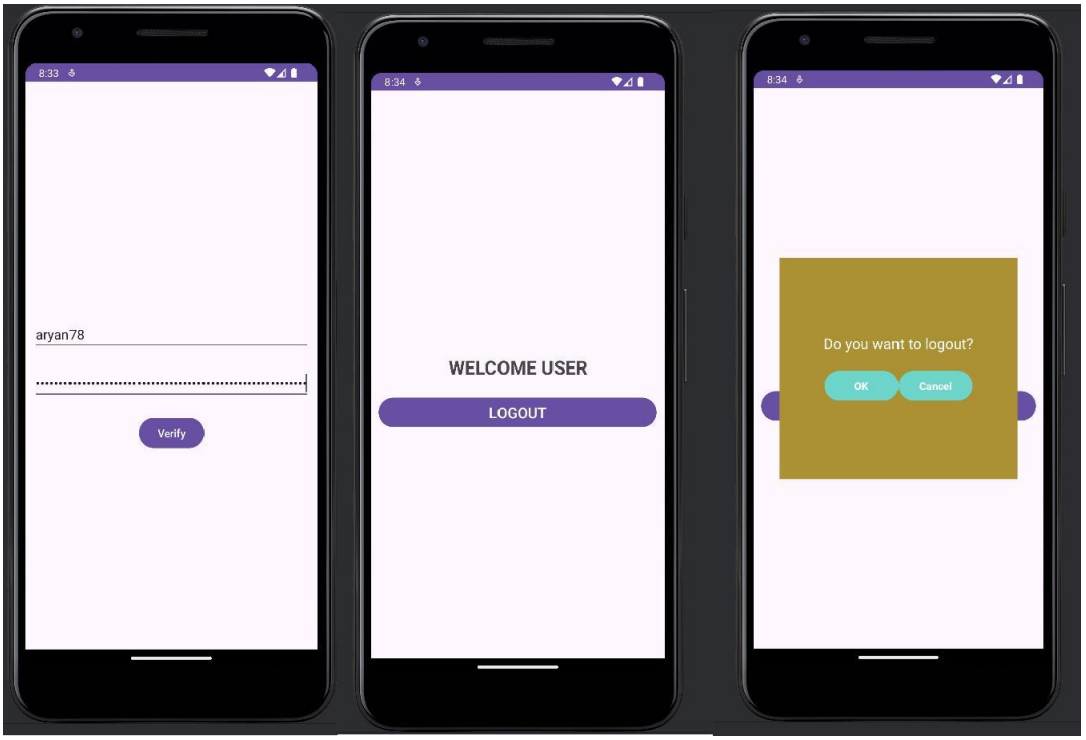
activity_home_page.xml:

```
<?xmlversion="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"
    android:layout_width="match_parent"
    android:layout_height="match_parent" android:layout_margin="10sp">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="20sp"
        android:text="WELCOME USER" android:textSize="25sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```
    android:layout_marginTop="20sp"
    android:onClick="logoutModal"
    android:text="LOGOUT" android:textSize="20sp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView" />

<RelativeLayout
    android:id="@+id/logoutModal" android:layout_width="match_parent"
    android:layout_height="300sp" android:background="#AC9034"
    android:padding="10sp"
    android:visibility="gone"
    app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" android:layout_margin="25sp"
    app:layout_constraintTop_toTopOf="parent">

    <RelativeLayout android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true">

        <TextView
            android:id="@+id/logoutText" android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:padding="10sp" android:text="Do you want
            to logout?" android:textColor="@color/white"
            android:textSize="20sp" />
        <LinearLayout
            android:layout_width="wrap_content" android:layout_height="wrap_content"
            android:layout_below="@+id/logoutText" android:layout_centerHorizontal="true"
            android:padding="10sp">

            <Button
                android:layout_width="100sp"
                android:layout_height="wrap_content"
```

```
            android:layout_below="@+id/logoutText" android:text="OK"
            android:onClick="logout"
            android:textStyle="bold"
            android:backgroundTint="#6ED5CB"
            app:layout_constraintBottom_toBottomOf="parent"  />

        <Button
            android:layout_width="100sp"
            android:layout_height="wrap_content" android:layout_below="@+id/logoutText"
            android:text="Cancel"
            android:onClick="cancel"
            android:textStyle="bold"
            android:backgroundTint="#6ED5CB"
            app:layout_constraintBottom_toBottomOf="parent"   />

             </LinearLayout>


          </RelativeLayout>

    </RelativeLayout>

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

OUTPUT:


8:33
aryan78
Verify
8:34
WELCOME USER
LOGOUT
8:34
Do you want to logout?
OK
Cancel

Q9.Create an application to performtheoperationsof create, insert, delete, viewandupdate, usingsqlite database.

CODE:-

MainActivity.java:

package com.example.q9madpractical; import android.os.Bundle; import android.widget.Button; import android.widget.EditText; import android.widget.RadioButton; import android.widget.RadioGroup; import android.widget.TextView; import androidx.activity.EdgeToEdge; import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets; import androidx.core.view.ViewCompat; import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity { private EditText billAmountEditText; private RadioGroup discountRadioGroup; private TextView discountAmountTextView; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState) EdgeToEdge.enable(this); setContentView(R.layout.activity_main); ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> { Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars()); v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom); return insets; }); billAmountEditText = findViewById(R.id.billAmountEditText); discountRadioGroup = findViewById(R.id.discountRadioGroup); discountAmountTextView = findViewById(R.id.discountAmountTextView); // Set a listener for the radio group to calculate discount Button calculateButton = findViewById(R.id.calculateButton); calculateButton.setOnClickListener(v -> calculateDiscount()); } private void calculateDiscount() { double billAmount = Double.parseDouble(billAmountEditText.getText().toString()); int discountPercentage = getSelectedDiscountPercentage(); int discountAmount = (int) ((billAmount * discountPercentage) / 100); discountAmountTextView.setText("Discount Amount: " + discountAmount); } private int getSelectedDiscountPercentage() { int selectedId = discountRadioGroup.getCheckedRadioButtonId(); RadioButton radioButton = findViewById(selectedId); if (radioButton.getId() == R.id.tenPercentRadioButton) { return 10; } else if (radioButton.getId() == R.id.fifteenPercentRadioButton) { return 15; } else if (radioButton.getId() == R.id.twentyPercentRadioButton) { return 20; } else { return 0; } } }

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:id="@+id/main"

android:layout_width="match_parent"

android:layout_height="match_parent"

tools:context=".MainActivity">

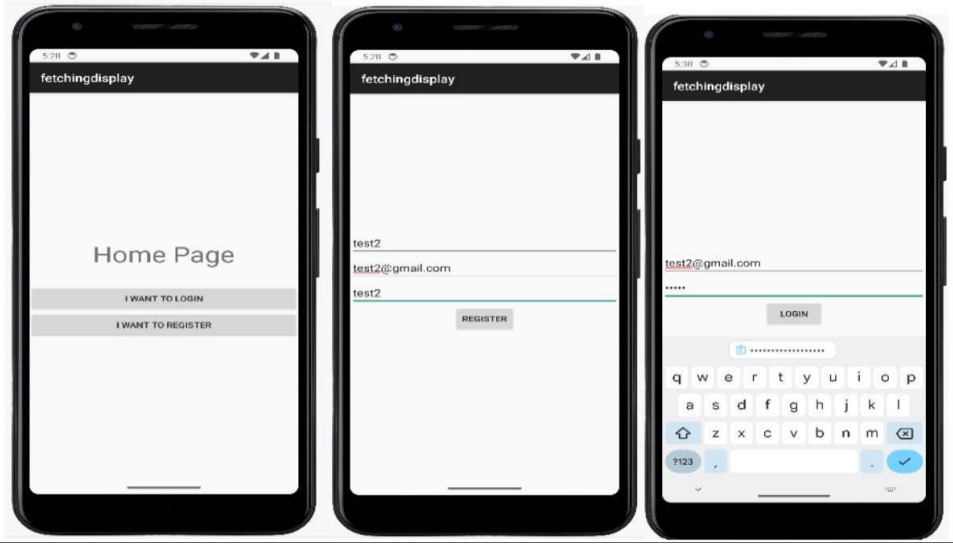
```
    <EditText
        android:id="@+id/billAmountEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="16dp"
        android:hint="Enter Bill Amount"
        android:inputType="numberDecimal"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <RadioGroup
        android:id="@+id/discountRadioGroup"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
android:layout_margin="16dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/billAmountEditText">

        <RadioButton
            android:id="@+id/tenPercentRadioButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:checked="true"
            android:text="10% Discount" />

        <RadioButton
            android:id="@+id/fifteenPercentRadioButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="15% Discount" />
```

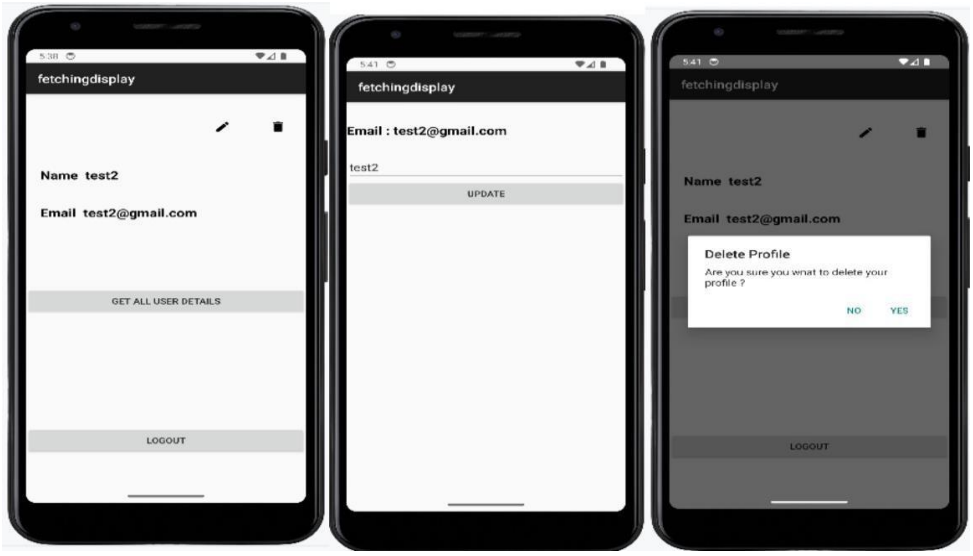
```
        <RadioButton
            android:id="@+id/twentyPercentRadioButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="20% Discount" />
    </RadioGroup>
<Button
        android:id="@+id/calculateButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="16dp"
        android:text="Calculate Discount"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/discountRadioGroup"  />

    <TextView
        android:id="@+id/discountAmountTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="16dp"
        android:text="Discount Amount: "
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@id/calculateButton"  />
  </androidx.constraintlayout.widget.ConstraintLayout>
```

AndroidManifest.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Q9MADpractical"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

OUTPUT


fetchingdisplay
Home Page
I WANT TO LOGIN
I WANT TO REGISTER
fetchingdisplay
test2
test2@gmail.com
test2
REGISTER
fetchingdisplay
test2@gmail.com
LOGIN


fetchingdisplay
Name test2
Email test2@gmail.com
GET ALL USER DETAILS
LOGOUT
fetchingdisplay
Email : test2@gmail.com
test2
UPDATE
fetchingdisplay
Name test2
Email test2@gmail.com
Delete Profile
Are you sure you wnat to delete your profile ?
NO
YES
LOGOUT

Q10. Create an application to pick up anyimagefromthe nativeapplication galleryanddisplay it on thescreen.

CODE:-

MainActivity.java:

```
package com.example.imagegallery;



import androidx.appcompat.app.AppCompatActivity; import
android.content.Intent;
import android.net.Uri; import
android.os.Bundle; import
android.view.View; import
android.widget.Button;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {

    Button BSelectImage;

    ImageView IVPreviewImage;

    int SELECT_PICTURE= 200;
```

```
@Override
protectedvoidonCreate(BundlesavedInstanceState){
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);


    BSelectImage = findViewById(R.id.BSelectImage); IVPreviewImage =
    findViewById(R.id.IVPreviewImage);


    BSelectImage.setOnClickListener(new View.OnClickListener() { @Override
        publicvoidonClick(View v) { imageChooser();
        }
     });
}

void imageChooser() {

    Intent i = new Intent(); i.setType("image/*");
    i.setAction(Intent.ACTION_GET_CONTENT);

    startActivityForResult(Intent.createChooser(i,"Select Picture"),  SELECT_PICTURE);
}

public void onActivityResult(int requestCode, int resultCode, Intent data)
{
     super.onActivityResult(requestCode,  resultCode,  data);

    if (resultCode == RESULT_OK) {


        if (requestCode == SELECT_PICTURE) {

            UriselectedImageUri=data.getData();  if (null!=
```

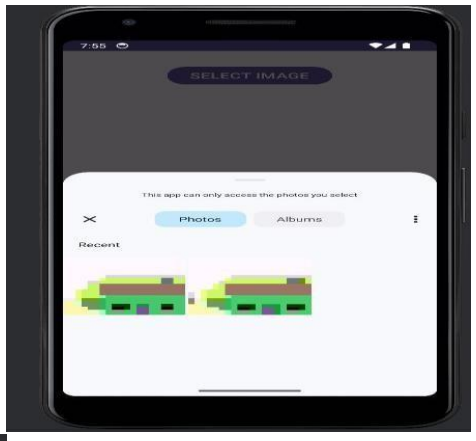
```
            selectedImageUri) {

                IVPreviewImage.setImageURI(selectedImageUri);
            }
        }
    }
}
```

activity_main.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent" tools:context=".MainActivity"
    tools:ignore="HardcodedText">

    <Button
        android:id="@+id/BSelectImage"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="32dp" android:text="SELECT IMAGE"
        android:textColor="@android:color/white" android:textSize="18sp" />


    <ImageView
        android:id="@+id/IVPreviewImage" android:layout_width="match_parent"
        android:layout_height="300dp" android:layout_below="@id/BSelectImage"
        android:layout_marginStart="16dp" android:layout_marginTop="16dp"
        android:layout_marginEnd="16dp" />

</RelativeLayout>
```

OUTPUT:


7:55
SELECT IMAGE


7:55
SELECT IMAGE
This app can only access the photos you select
Photos
Albums
Recent


7:56
SELECT IMAGE

Q11.Create an application to takepictureusingnative application.

CODE:-

MainActivity.java:

```
package com.example.camera;


importandroid.graphics.Camera; import
android.os.Bundle; importandroid.view.View;
importandroid.content.Intent; import
android.graphics.Bitmap; import
androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity; import
androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
importandroidx.core.view.WindowInsetsCompat; import
android.provider.MediaStore;
importandroid.widget.Button; import
android.widget.ImageView;


publicclass MainActivityextends AppCompatActivity{ privatestaticfinalint
pic_id=123;
ImageView click_image_id; @Override
    protectedvoidonCreate(BundlesavedInstanceState){
        super.onCreate(savedInstanceState);
```

```
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        View camera_open_id = findViewById(R.id.camera_button); click_image_id =
        findViewById(R.id.click_image);


        camera_open_id.setOnClickListener(v -> { Intent camera_intent =
            new
Intent(MediaStore.ACTION_IMAGE_CAPTURE);
            startActivityForResult(camera_intent, pic_id);
        });
    }
    protected void onActivityResult(int RequestCode,int ResultCode,Intent data){
        super.onActivityResult(RequestCode,ResultCode,data); if
        (RequestCode==pic_id){
            Bitmapphoto=(Bitmap) data.getExtras().get("data"); click_image_id.setImageBitmap(photo);


        }
    }
}
```

activity_main.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent" tools:context=".MainActivity">


   <Button
       android:id="@+id/camera_button"
       android:layout_width="100dp"
       android:layout_height="50dp"
       android:layout_marginStart="150dp"
       android:text="Camera"/>
```

```
    <ImageView
        android:id="@+id/click_image" android:layout_width="350dp"
        android:layout_height="450dp" android:layout_marginStart="30dp"
        android:layout_marginTop="70dp"
        android:layout_marginBottom="10dp"/>


</RelativeLayout>
```

AndroidManifest.xml:

```
<?xmlversion="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.camera">
    <uses-permission
        android:name="android.permission.CAMERA"
        android:required="true" android:requiredFeature="true"/>
    <uses-feature
        android:name="android.hardware.camera.any"  android:required="true" />
    <uses-feature
        android:name="android.hardware.camera.autofocus"
        android:required="false" />

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules" android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Camera" tools:targetApi="31">
        <activity
```

```
        android:name=".MainActivity"
        android:exported="true"
        tools:ignore="Instantiatable,MissingClass">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

OUTPUT: