

ANDROID LAB RECORD

Submitted by:

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Program no 1:

Aim: Program to develop the android mobile application which consist of GUI components for Login Page creation.

XML Code

activity_main.xml

```
<?xml version="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"
    tools:context=".MainActivity"
    android:orientation="vertical"
    android:background="@drawable/a4">

    <TextView
        android:id="@+id/l1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:gravity="center"
        android:text="Login"
        android:textColor="#630DFB"
        android:textSize="50dp"
        tools:layout_editor_absoluteX="31dp"
        tools:layout_editor_absoluteY="39dp" />

    <EditText
        android:id="@+id/e1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"

        android:ems="10"
        android:inputType="textPersonName"
        android:minHeight="48dp"
        android:text="User Name" />

    <EditText
        android:id="@+id/e2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPassword"
        android:minHeight="48dp"
        android:text="Password" />

    <Button
        android:id="@+id/b1"
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="right"

```

```

        android:text="Button" />

```

```

</LinearLayout>

```

MainActivity.java

```

package com.example.myapplication222;

```

```

import androidx.appcompat.app.AppCompatActivity;

```

```

import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

```

```

public class MainActivity extends AppCompatActivity {
    private TextView t1;
    private EditText e1;
    private EditText e2;
    private Button b1;

```

```

    @Override

```

```

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

```

```

        b1=findViewById(R.id.b1);
        e1=findViewById(R.id.e1);
        e2=findViewById(R.id.e2);

```

```

    }
}

```

Output



Program no 2:

Aim: Program to display the content of EditText in TextView on button click.

XML Code**activity_main.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"
    tools:context=".MainActivity"
    android:orientation="vertical"
    android:background="#DFF6C4">

    <EditText
        android:layout_width="261dp"
        android:layout_height="78dp"
        android:id="@+id/text1"
        android:hint="Write here!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        android:background="@color/teal_700"
        android:textSize="25dp"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"/>

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

```
android:gravity="center"
```

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

```
<TextView
```

```
    android:id="@+id/textView2"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="70dp"
```

```
    android:layout_gravity="center"
```

```
    android:text="Your text is" />
```

MainActivity.java

```
package com.example.display;
```

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

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

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import android.widget.EditText;
```

```
import android.widget.TextView;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    private EditText t1;
```

```
    private TextView t2;
```

```
    private Button b1;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

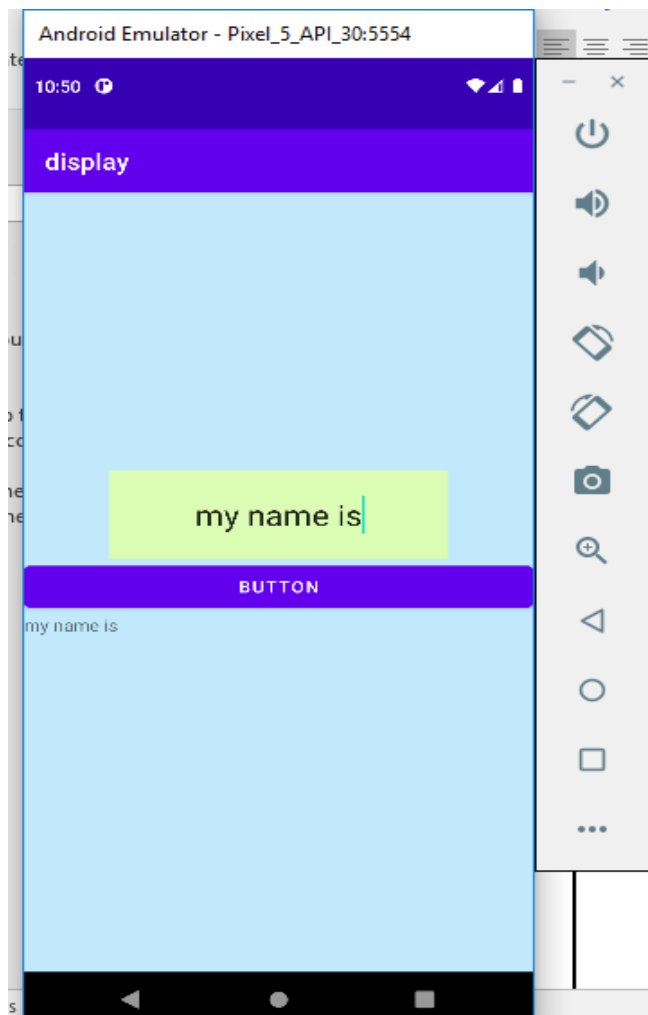
```
        setContentView(R.layout.activity_main);
```

```
        t1=findViewById(R.id.text1);
```

```
        t2=findViewById(R.id.textView2);
```

```
b1=findViewById(R.id.button);  
b1.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        String value = t1.getText().toString();  
        t2.setText(String.valueOf(value));  
    }  
});  
  
}  
}
```

OUTPUT



Program no: 03

Aim: Design a Login Form with username and password using
LinearLayout and toast valid credentials

XML Code:

```
<?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:orientation="vertical"
    android:gravity="center"
    android:layout_height="match_parent"
    android:background="@drawable/f5"

    tools:context=".MainActivity">

    <TextView
        android:id="@+id/t1"
        android:layout_width="212dp"
        android:layout_height="61dp"

        android:text="LOGIN" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        android:layout_marginLeft="20dp"
        android:layout_marginRight="20dp">

        <com.google.android.material.textfield.TextInputLayout
            android:id="@+id/edturn"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
```

```

        android:hint="Username"
        < style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox">
<com.google.android.material.textfield.TextInputEditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:inputType="text"/>
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
        android:id="@+id/edtpswd"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Password"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox">
        <com.google.android.material.textfield.TextInputEditText
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="text"/>
        </com.google.android.material.textfield.TextInputLayout>
</LinearLayout>
<Button
        android:id="@+id/btnlgn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"/>

</LinearLayout>

```

Java Code:

```
package com.example.a5;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.content.Intent;

import android.util.Log;

import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import com.google.android.material.textfield.TextInputLayout;

public class MainActivity extends AppCompatActivity {
    TextView t1;
    TextInputLayout e1, e2;
    Button b1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        t1 = findViewById(R.id.t1);
        e1 = findViewById(R.id.edturn);
        e2 = findViewById(R.id.edtpswd);
        b1 = findViewById(R.id.btnlgn);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
```


Output



Program no: 04

Aim: Implementing basic arithmetic operations of a simple calculator

XML Code:

```
<?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"
    tools:context=".simpleCal"
    android:padding="20dp"
    android:orientation="vertical"
    android:background="@color/bg">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="CALCULATOR"
        android:textSize="25sp"
        android:layout_marginBottom="16dp"
        android:textColor="@android:color/black" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginBottom="20dp">

        <EditText
            android:id="@+id/first_no"
            android:layout_width="102dp"
            android:layout_height="59dp"
            android:ems="10" android:layout_marginHorizontal="50dp"
            android:hint="Enter no1" />

        <EditText
```

```

android:id="@+id/second_no"
android:layout_width="102dp"
android:layout_height="59dp"
android:ems="10"
android:hint="Enter no2" />
</LinearLayout>
<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal"
android:gravity="center"
android:layout_marginBottom="20dp">
<TextView
android:textSize="35sp"
android:id="@+id/answer"
android:layout_width="wrap_content"
android:layout_height="59dp"
android:layout_marginHorizontal="50dp"
android:hint="ans" />
</LinearLayout>
<LinearLayout
android:orientation="vertical"
android:layout_marginLeft="50dp"
android:layout_width="230dp"
android:layout_height="wrap_content"
android:layout_marginBottom="30dp">
<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal">
<Button
android:id="@+id/sub"

```

```

    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    Applicationsandroid:text="-"
    android:layout_marginRight="50dp"
    android:textSize="25sp"
    android:layout_marginBottom="16dp" />
<Button
    android:id="@+id/add"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="16dp"
    android:text="+" android:textSize="25sp"
    tools:ignore="OnClick" />
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <Button
        android:id="@+id/div"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginRight="50dp">

```

Java Code:

```

package com.example.My App4;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

```



```

import android.widget.Toast;

public class simpleCal extends AppCompatActivity {
    EditText no1, no2;
    Button add, mul, div, sub, equal;
    TextView answer;
    double ans = 0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_simple_cal);
        no1 = findViewById(R.id.first_no);
        no2 = findViewById(R.id.second_no);
        add = findViewById(R.id.add);
        mul = findViewById(R.id.mul);
        div = findViewById(R.id.div);
        sub = findViewById(R.id.sub);
        equal = findViewById(R.id.equals);
        answer = findViewById(R.id.answer);
        add.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String num1 = no1.getText().toString();
                String num2 = no2.getText().toString();
                if (num1.isEmpty() || num2.isEmpty()) {
                    Toast.makeText(getApplicationContext(), "Enter Numbers",
                        Toast.LENGTH_SHORT).show();
                } else {
                    double a = Double.parseDouble(no1.getText().toString());
                    double b = Double.parseDouble(no2.getText().toString());
                    ans = a + b;
                }
            }
        });
    }
}

```

```

});
sub.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String num1 = no1.getText().toString();
        String num2 = no2.getText().toString();
        if (num1.isEmpty() || num2.isEmpty()) {
            Toast.makeText(getApplicationContext(), "Enter Numbers",
            Toast.LENGTH_SHORT).show();
        } else {
            double a = Double.parseDouble(no1.getText().toString());
            double b = Double.parseDouble(no2.getText().toString());
            ans = a - b;
        }
    }
});
mul.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String num1 = no1.getText().toString();
        String num2 = no2.getText().toString();
        if (num1.isEmpty() || num2.isEmpty()) {
            Toast.makeText(getApplicationContext(), "Enter Numbers",
            Toast.LENGTH_SHORT).show();
        } else {
            double a = Double.parseDouble(no1.getText().toString());
            double b = Double.parseDouble(no2.getText().toString());
            ans = a * b;
        }
    }
});
div.setOnClickListener(new View.OnClickListener() {
    @Override

```

```

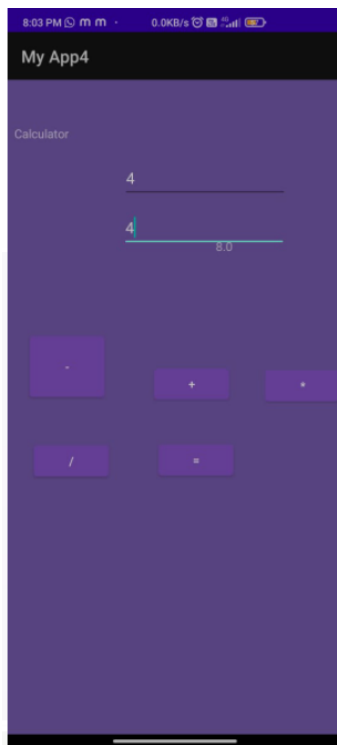
public void onClick(View v) {
    String num1 = no1.getText().toString();
    String num2 = no2.getText().toString();
    if (num1.isEmpty() || num2.isEmpty()) {
        Toast.makeText(getApplicationContext(), "Enter Numbers",
            Toast.LENGTH_SHORT).show();
    } else {
        double a = Double.parseDouble(no1.getText().toString());
        double b = Double.parseDouble(no2.getText().toString());
        if (b != 0)
            ans = a / b;
        else
            Toast.makeText(getApplicationContext(), "Enter Valid Numbers",
                Toast.LENGTH_SHORT).show();
    }
}

});

equal.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String ans1 = String.valueOf(ans);
        answer.setText(ans1);
        ans = 0;
    }
});
}
}

```

Output



Program no: 05**Aim:** Implement validations on various UI controls**XML Code:**

```

<?xml version="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:orientation="vertical"
    tools:context=".Ui_validation"
    tools:ignore="HardcodedText">

    <EditText

    android:id="@+id/firstName"

    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="16dp"
    android:hint="First Name"
    android:inputType="text" />
    Applications<EditText
    android:id="@+id/lastName"

    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="16dp"
    android:hint="Last Name"
    android:inputType="text" />

    <EditText>

    android:id="@+id/lastName"

```

```

    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="16dp"
    android:hint="Last Name"
    android:inputType="text" />
<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="16dp"
    android:hint="Email"
    android:inputType="textEmailAddress" />
<EditText
    android:id="@+id/password"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
    android:layout_marginEnd="16dp"
    android:hint="Password"
    android:inputType="textPassword" />
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="8dp"
    android:gravity="end" android:orientation="horizontal">
<Button
    android:id="@+id/cancelButton"

```

```

style="@style/Widget.AppCompat.Button.Borderless"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="4dp"
android:text="CANCEL"
android:textColor="@color/white" />
<Button
android:id="@+id/proceedButton"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="16dp"
android:backgroundTint="@color/black"
android:text="PROCEED"
Applicationsandroid:textColor="@android:color/white"
tools:ignore="ButtonStyle" />
</LinearLayout>
</LinearLayout>

```

Java Code:

```

package com.example.ui;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class Ui_validation extends AppCompatActivity {
    Button bCancel, bProceed;
    EditText etFirstName, etLastName, etEmail, etPassword;
    boolean isAllFieldsChecked = false;
    Applications@Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

```

```

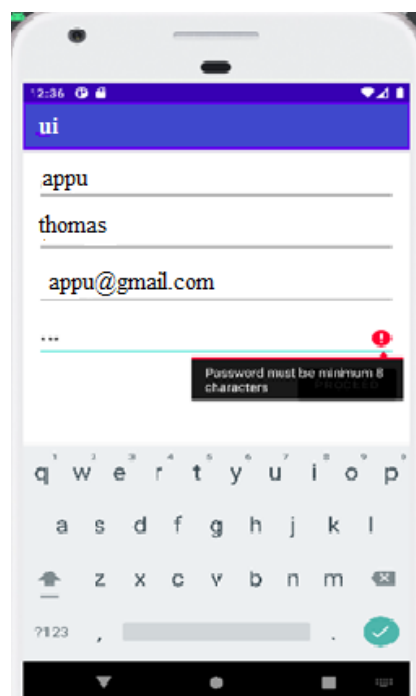
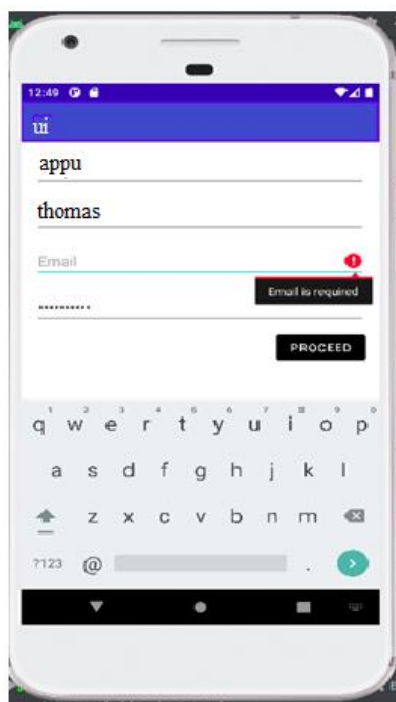
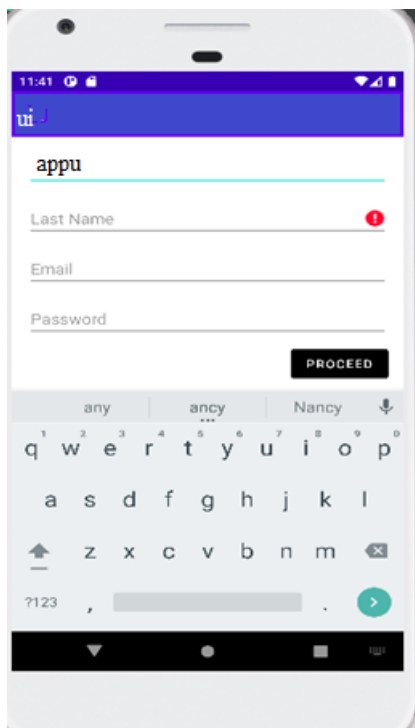
setContentView(R.layout.activity_ui_validation);
bProceed = findViewById(R.id.proceedButton);
bCancel = findViewById(R.id.cancelButton);
etFirstName = findViewById(R.id.firstName);
etLastName = findViewById(R.id.lastName);
etEmail = findViewById(R.id.email);
etPassword = findViewById(R.id.password);
bProceed.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        isAllFieldsChecked = CheckAllFields();
        if (isAllFieldsChecked) {
            Intent i = new Intent(Ui_validation.this, Dashboard.class);
            startActivity(i);
        }
    }
});
bCancel.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Ui_validation.this.finish();
        System.exit(0);
    }
});
private boolean CheckAllFields() {
    if (etFirstName.length() == 0) {
        etFirstName.setError("This field is required");
        return false;
    }
    if (etLastName.length() == 0) {
        etLastName.setError("This field is required");
    }
}

```



```
return false;
}
if (etEmail.length() == 0) {
etEmail.setError("Email is required");
return false;
}
if (etPassword.length() == 0) {
etPassword.setError("Password is required");
return false;
} else if (etPassword.length() < 8) {
etPassword.setError("Password must be minimum 8 characters");
return false;
}
}
}
```

Output



Program no: 06

Aim: Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences

XML Code

activity.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"
    android:background="@color/teal_700"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/btnadd"
        android:layout_width="87dp"
        android:layout_height="52dp"
        android:text="ADD"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/tv111"
        app:layout_constraintVertical_bias="0.12" />

    <TextView
        android:id="@+id/tv111"
        android:layout_width="293dp"
        android:layout_height="100dp"
        android:layout_marginTop="176dp"
        android:textFontWeight="@integer/material_motion_duration_long_1"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.745"
```

```

        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

add.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".add">
    <Button
        android:id="@+id/btnsub"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="56dp"
        android:text="SAVE"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextdta"
        app:layout_constraintVertical_bias="0.241" />
    <EditText
        android:id="@+id/editTextdta"
        android:layout_width="199dp"
        android:layout_height="54dp"

```

```

        android:layout_marginTop="248dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"/>
<TextView
    android:id="@+id/textviewname"
    android:layout_width="207dp"
    android:layout_height="46dp"
    android:text="Name"
    app:layout_constraintBottom_toTopOf="@+id/editTextdta"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.686"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

Java code:

```

package com.example.todolist1;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    Button btn;
    TextView tv11;
    SharedPreferences sharedPreferences;

```

```

public static final String SHARED_PREF_NAME="mypref";
public static final String KEY_NAME="";

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

private void addListeneronButton() {
    btn=(Button) findViewById(R.id.btnAdd);
    tv11=(TextView) findViewById(R.id.tv111);
    sharedPreferences =
getSharedPreferences(SHARED_PREF_NAME,MODE_PRIVATE);
    String name=sharedPreferences.getString(KEY_NAME,String.valueOf(0));
    tv11.setText("Name "+name);
    btn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent=new Intent(MainActivity.this,add.class);
            startActivity(intent);
        }
    });
}
}

```

Add.java

```

package com.example.todolist;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;

```

```

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class add extends AppCompatActivity {

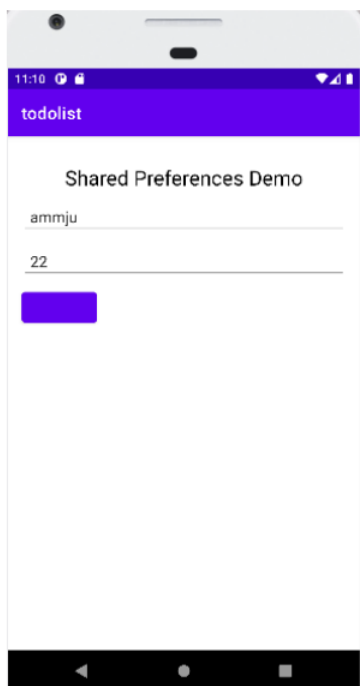
    EditText tf;
    TextView tv;
    Button sub;
    String n1;
    SharedPreferences sharedPreferences;

    public static final String SHARED_PREF_NAME="mypref";
    public static final String KEY_NAME="";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_add);
        addButton();
    }
    private void addButton() {
        sub = (Button) findViewById(R.id.btnsub);
        tv = (TextView) findViewById(R.id.textviewname);
        tf = (EditText) findViewById(R.id.editTextdta);
        sharedPreferences =
getSharedPreferences(SHARED_PREF_NAME,MODE_PRIVATE);
        String name = sharedPreferences.getString(KEY_NAME, String.valueOf(0));
        sub.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String n1=tf.getText().toString();
                SharedPreferences.Editor editor = sharedPreferences.edit();

```

```
        editor.putString(KEY_NAME,n1);  
        editor.commit();  
        Intent int1 = new Intent(add.this, MainActivity.class);  
        startActivity(int1);  
    }  
});  
}  
}
```

Output





Program no: 07**Aim:** Design a simple Calculator using GridLayout and Cascaded LinearLayout**XML Code:**

```

<?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="#00000000"

    0"

    android:layout_gravity="bottom"

    android:gravity="bottom"

    android:orientation="vertical"

    tools:context=".Output">

    <LinearLayout

        android:layout_width="match_parent

        "

        android:layout_height="wrap_conten

        t" android:orientation="vertical">

    <LinearLayout

        android:layout_width="match_parent

```

```

"
    android:layout_height="wrap_content"
"
    android:layout_gravity="end"
    android:orientation="vertical"
>

```

```

<TextView
    android:layout_width="match_parent"
    "
    android:layout_height="wrap_content"
    " android:layout_marginEnd="20dp"
    android:text="18+7"
    android:textAlignment="textEnd"
    android:textColor="@color/black"
    android:textSize="40dp" />

```

```

<TextView
    android:layout_width="match_parent"
    "
    android:layout_height="wrap_content"
    " android:layout_marginEnd="20dp"
    android:text="=25"
    android:textAlignment="textEnd"
    android:textColor="@color/black"
    android:textSize="40dp" />

```

```

</LinearLayout>

```

```
<GridLayout
```

```
    android:layout_width="wrap_content"
    "
```

```
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
```

```
    android:layout_weight="1"
    "
```

```
    android:columnCount="4"
    "
```

```
    android:gravity="bottom"
    android:rowCount="4">
```

```
<Button
```

```
    android:id="@+id/b9"
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:background="@drawable/bg_button"
    android:text="9"
    android:textColor="@color/white"
    android:textSize="25dp" />
```

```
<Button
```

```
    android:id="@+id/b8"
```

```

android:layout_width="50dp"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:background="@drawable/bg_button"
android:text="8"
android:textColor="@color/white"
android:textSize="25dp" />

```

```

android:id="@+id/b7"
android:layout_width="50dp"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:background="@drawable/bg_button"
android:text="7"
android:textColor="@color/white"
android:textSize="25dp" />

```

<Button

```

android:id="@+id/bmult"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
" android:layout_margin="10dp"
android:background="#F86605"
android:text="x"
android:textColor="@color/white"

```

```
android:textSize="18dp" />
```

```
<Button
```

```
    android:id="@+id/b6"  
    android:layout_width="50dp"  
    android:layout_height="wrap_content"  
    android:layout_margin="10dp"  
    android:background="@drawable/bg_butto  
n" android:text="6"  
    android:textColor="@color/white"  
    android:textSize="25dp" />
```

```
<Button
```

```
    android:id="@+id/b5"  
    android:layout_width="50dp"  
    android:layout_height="wrap_content"  
    android:layout_margin="10dp"  
    android:background="@drawable/bg_butto  
n" android:text="5"  
    android:textColor="@color/white"  
    android:textSize="25dp" />
```

```
<Button
```

```
    android:id="@+id/b4"  
    android:layout_width="50dp"  
    android:layout_height="wrap_content"  
    android:layout_margin="10dp"
```

```

        android:background="@drawable/bg_button"
        android:text="4"
        android:textColor="@color/white"
        android:textSize="25dp" />

```

<Button

```

        android:id="@+id/bdiv"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:background="#F86605"
        android:text="/"
        android:textColor="@color/white"
        android:textSize="25dp" />

```

<Button

```

        android:id="@+id/b3"
        android:layout_width="50dp"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:background="@drawable/bg_button"
        android:text="3"
        android:textColor="@color/white"
        android:textSize="25dp" />

```

<Button

```

        android:id="@+id/b2"

```

```

android:layout_width="50dp"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:background="@drawable/bg_button"
android:text="2"
android:textColor="@color/white"
android:textSize="25dp" />

```

<Button

```

android:id="@+id/b1"
android:layout_width="50dp"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:background="@drawable/bg_button"
android:text="1"
android:textColor="@color/white"
android:textSize="25dp" />

```

<Button

```

android:id="@+id/bminus"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
" android:layout_margin="10dp"
android:background="#F86605"
android:text="-"
android:textColor="@color/white"
android:textSize="25dp" />

```


<Button

```

    android:id="@+id/b0"
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:background="@drawable/bg_button"
    android:text="0"
    android:textColor="@color/white"
    android:textSize="25dp" />

```

<Button

```

    android:id="@+id/b."
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:background="@drawable/bg_button"
    android:text="."
    android:textColor="@color/white"
    android:textSize="25dp" />

```

<Button

```

    android:id="@+id/bequal"
    android:layout_width="50dp"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:background="@drawable/bg_button"
    android:text=""

```

```

        android:textColor="@color/white"
        android:textSize="25dp" />

<Button
    android:id="@+id/bplus"
    android:layout_width="wrap_content"
    "
    android:layout_height="wrap_conten
    t" android:layout_margin="10dp"
    android:background="#F86605"
    android:text="+"
    android:textColor="@color/whi
    te"
    android:textSize="25dp" />
</GridLayout>
</LinearLayout>

</LinearLayout>

```

Java Code:

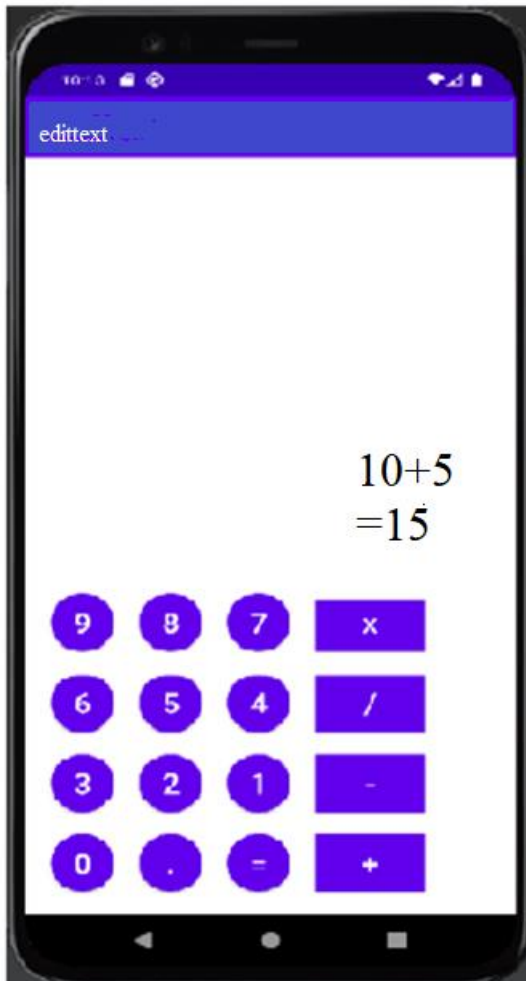
```

package com.example.edittest;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
public class Output extends AppCompatActivity {
    TextView t1;
    @Override

```

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_output);  
}  
}
```

Output



Program no: 08

Aim: Create a Facebook page using RelativeLayout; set properties using .xml file

XML Code:

```
<?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="@color/white"
    tools:context=".facebook">

    <LinearLayout

        android:layout_width="match_parent
        "
        android:layout_height="match_paren
        t" android:background="#29487D"
        android:gravity="center|top"
        android:orientation="vertical">

        <LinearLayout

            android:layout_width="wrap_content"
            android:layout_height="wrap_content
            " android:layout_marginTop="70dp"
```

```

        android:layout_marginBottom="100d
p" android:orientation="vertical">

<TextView

    android:layout_width="wrap_content
    "

    android:layout_height="wrap_conten
t" android:fontFamily="@font/arvo"

    android:padding="10dp"

    android:text="facebook"

    android:textColor="@color/white"

    android:textSize="36dp" />

```

```
</LinearLayout>
```

```

<LinearLayout

    android:layout_width="match_parent
    "

    android:layout_height="wrap_conten
t" android:padding="15dp"

    android:orientation="vertical"

    android:layout_margin="20dp">

<EditText

    android:layout_width="match_parent
    "

    android:layout_height="wrap_conten
t" android:hint="Email or Phone"

    android:layout_marginBottom="30dp
    "

```

```
android:textColorHint="#594F4F"/>
```

```
<EditText
```

```
    android:layout_width="match_parent"
    "
```

```
    android:layout_height="wrap_content"
    "
```

```
    android:layout_marginBottom="30dp"
    android:hint="password"
    android:textColorHint="#594F4F"/>
```

```
<Button
```

```
    android:layout_width="match_parent"
    "
```

```
    android:layout_height="wrap_content"
    android:text="Log In"
```

```
    android:background="@color/design_default_color_primary"
    android:textAllCaps="false"/>
```

```
</LinearLayout>
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"
    "
```

```
    android:layout_height="wrap_content"
    android:orientation="horizontal"
```

```
    android:layout_marginTop="180dp"
    android:layout_gravity="bottom"
```

```

        android:gravity="center">
        <TextView
            android:layout_width="wrap_content
            "
            android:layout_height="wrap_conten
            t" android:gravity="end"
            android:textStyle="bold"
            android:textColor="@color/white"
            android:layout_weight="50"
            android:text="SignUp for
            Facebook"/>
        <TextView
            android:layout_width="wrap_content
            "
            android:layout_height="wrap_conten
            t" android:gravity="end"
            android:textColor="@color/white"
            android:layout_marginEnd="130dp"
            android:layout_weight="1"
            android:textStyle="bold"
            android:text="?"/>
    </LinearLayout>
</LinearLayout>
</LinearLayout>

```

Java Code:

```
package com.example.myapplication;
```

```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;

public class facebook extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_facebook);
    }
}
```

Output



Program no: 09

Aim: Develop an application that toggles image using FrameLayout

XML Code:

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

<FrameLayout 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:layout_gravity="center" android:background="@color/bg2"
    tools:context=".image_toogle">

    <ImageView
        android:id="@+id/image2"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_gravity="center"

        android:src="@drawable/vd" android:visibility="gone"/>

    <ImageView
        android:id="@+id/image1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_gravity="center"

        android:src="@drawable/applogo" />

</FrameLayout>
```

Java Code:

```
package com.example.vaidyakare;

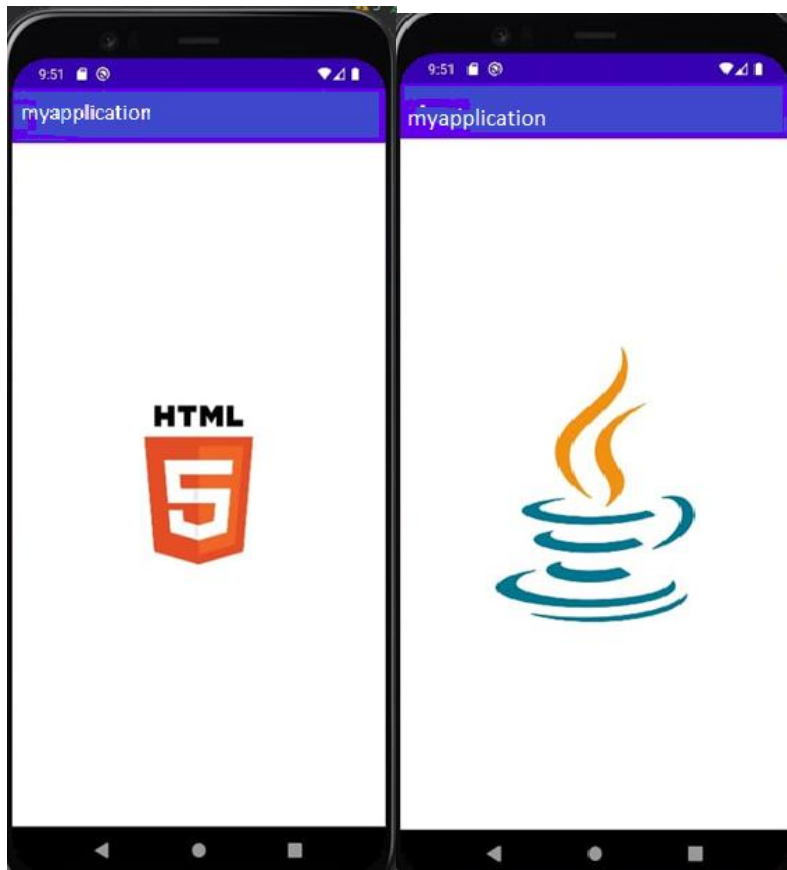
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;

public class image_toogle extends AppCompatActivity implements View.OnClickListener
{
    ImageView img1, img2;
```

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_image_toggle);
    img1 = findViewById(R.id.image1);
    img2 = findViewById(R.id.image2);
    img1.setOnClickListener(this);
    img2.setOnClickListener(this);
}

public void onClick(View v) {
    int id = v.getId();
    switch (id) {
        case R.id.image1:
            img1.setVisibility(View.GONE);
            img2.setVisibility(View.VISIBLE);
            break;
        case R.id.image2:
            img1.setVisibility(View.VISIBLE);
            img2.setVisibility(View.GONE);
            break;
    }
}
}
```

Output



Program no: 10

Aim: Implement Adapters and perform exception handling

XML Code:

```
<?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:gravity="center"

    tools:context=".exception">

    <TextView

    android:id="@+id/textView"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:text="TextView"/>

</LinearLayout>
```

Java Code:

```
package com.example.vaidyakare;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
import android.widget.Toast;

public class exception extends AppCompatActivity {
    TextView textView;

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

        try {
            textView.setText("Hello there...");
        } catch (Exception e) {
```

```
Toast.makeText(this, e.getMessage(), Toast.LENGTH_SHORT).show();  
}  
}  
}
```

Output



Program no: 12

Aim: Implement Intent to navigate between multiple activities

XML Code:

```
<?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"
android:onClick="callActivity"
tools:context=".intent_activity">

<EditText
android:id="@+id/name"

    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Name"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.437"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.148" />

<EditText
android:id="@+id/address"

    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10" android:hint="Address"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
```

```

app:layout_constraintHorizontal_bias="0.437"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.313" />
<EditText
    android:id="@+id/email"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10" android:hint="Email"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.437"
    app:layout_constraintStart_toStartOf="parent"
    sapp:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.475" />
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Submit" android:onClick="callActivity"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.454"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.609" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

Display.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=".intent_act2">
</TextView
android:id="@+id/view3"
    android:layout_width="189dp"
    android:layout_height="36dp"
    " android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.459"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.398" />
<TextView
    android:id="@+id/view1"
    android:layout_width="189dp"
    android:layout_height="36dp"
    android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.459"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.22" />
<TextView
    android:id="@+id/view2" android:layout_width="189dp"
    android:layout_height="36dp"
    android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"

```



```

app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.459"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.306" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

Java Code:

```

package com.example.vaidyakare;

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

public class intent_activity extends AppCompatActivity {
    Button b1;

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

    public void callActivity(View view) {
        Intent i = new Intent(intent_activity.this, intent_act2.class);
        final EditText editText1 = (EditText)findViewById(R.id.name);
        String msg = editText1.getText().toString();
        final EditText editText2 = (EditText)findViewById(R.id.address);
        String add = editText2.getText().toString();
        final EditText editText3 = (EditText)findViewById(R.id.email);
        String em = editText3.getText().toString();
        i.putExtra("Value1", msg);
        i.putExtra("Value2", add);
        i.putExtra("Value3", em);
    }
}

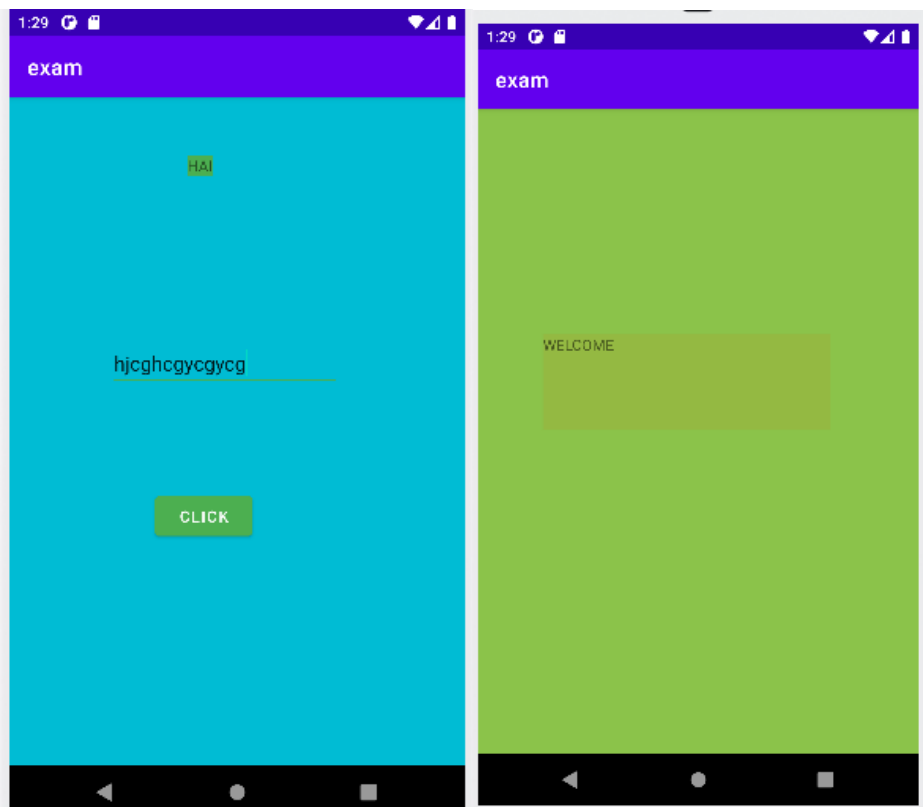
```

```
startActivity(i);  
}  
}
```

Display.java

```
package com.example.vaidyakare;  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.widget.TextView;  
public class intent_act2 extends AppCompatActivity {  
    TextView view1;  
    TextView view2;  
    TextView view3;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_intent_act2);  
        view1 = (TextView) findViewById(R.id.view1);  
        view2 = (TextView) findViewById(R.id.view2);  
        view3 = (TextView) findViewById(R.id.view3);  
        Bundle extras = getIntent().getExtras();  
        String value1 = extras.getString("Value1");  
        String value2 = extras.getString("Value2");  
        String value3 = extras.getString("Value3");  
        view1.setText(value1);  
        view2.setText(value2);  
        view3.setText(value3);  
    }  
}
```

Output



Program no: 13

Aim: Develop an application that works with explicit intents

XML Code:

```
<?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=".explicit">

    <Button

        android:id="@+id/cm"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Refer Google"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent" />

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

Java Code:

```
package com.example.myapplication;

import androidx.appcompat.app.ActionBar;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;
```

```
import android.net.UrlQuerySanitizer;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;


public class explicit extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_explicit);

        Button click = findViewById(R.id.cm);

        click.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View view) {

                Intent j = new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.google.com/"));

                startActivity(j);

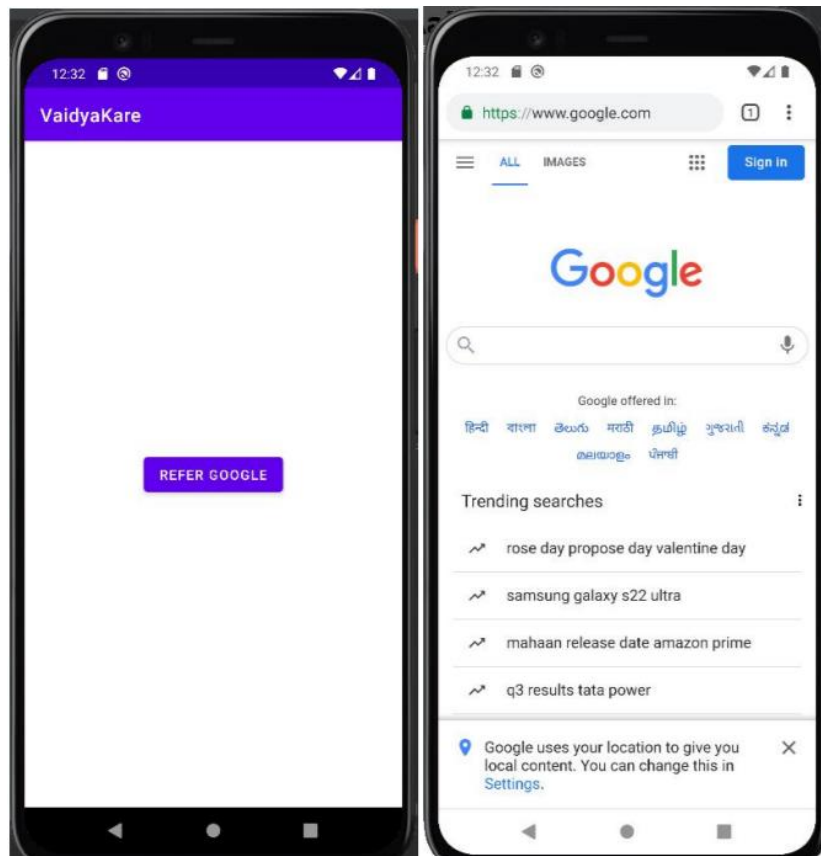
            }

        });

    }

}
```

Output



Program no: 14**Aim:** Implement Options Menu to navigate to activities**XML Code:**

```

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

<menu xmlns:android="http://schemas.android.com/apk/res/android">
<item android:id="@+id/item1" android:title="Home"/>
<item android:id="@+id/item2" android:title="Settings"/>
<item android:id="@+id/item3" android:title="About"/>
<item android:id="@+id/item4" android:title="Help"/>
<item android:id="@+id/item5" android:title="LogOut"/>
</menu>

<?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=".menu_bar">
<TextView
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Welcome Home..!"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

Java Code:

```

package com.example.vaidyakare;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

```

```

import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.Toast;

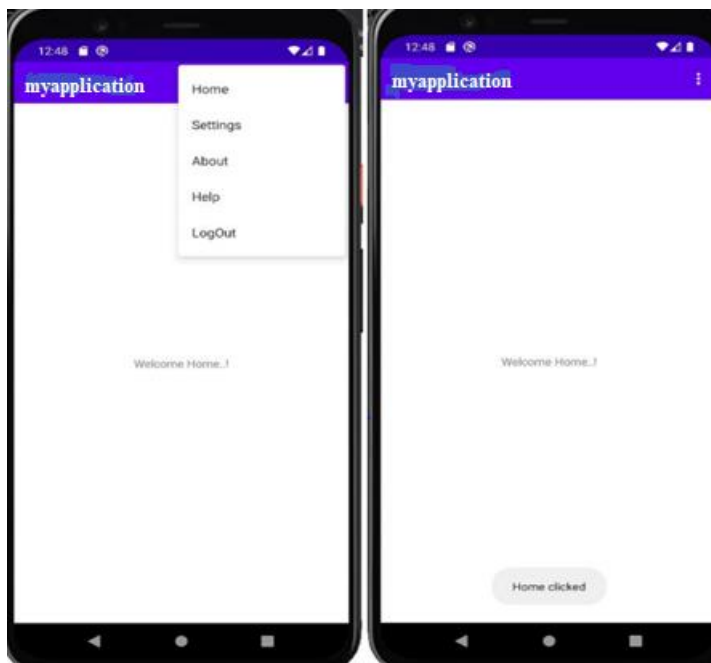
public class menu_bar extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_menu_bar);
    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.menu_list, menu);
        return true;
    }
    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        switch (item.getItemId()) {
            case R.id.item1:
                Toast.makeText(getApplicationContext(), "Home clicked",
                    Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item2:
                Toast.makeText(getApplicationContext(), "Settings clicked",
                    Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item3:
                Toast.makeText(getApplicationContext(), "About clicked",
                    Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item4:
                Toast.makeText(getApplicationContext(), "Help clicked", Toast.LENGTH_SHORT).show();
                return true;
        }
    }
}

```



```
case R.id.item5:  
    Toast.makeText(getApplicationContext(), "Logout clicked",  
        Toast.LENGTH_SHORT).show();  
  
    return true;  
  
default:  
    return super.onOptionsItemSelected(item);  
}  
}  
}
```

Output



Program no: 15

Aim: Develop an application that uses ArrayAdapter with ListViewXML

XML Code

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
xmlns:app="http://schemas.android.com/apk/res-auto"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".arrayAdapter">
<ListView
android:id="@+id/mobile_list"
android:layout_width="match_parent"
android:layout_height="wrap_content">
</ListView>
</LinearLayout>
```

Java Code:

```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;
public class arrayAdapter extends AppCompatActivity implements
AdapterView.OnItemClickListener {
ListView l;
String[] days = { "Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday",
"Saturday"};
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_array_adapter);
    l = findViewById(R.id.mobile_list);
    ArrayAdapter<String> adapter = new ArrayAdapter<String>(this,
        R.layout.support_simple_spinner_dropdown_item, days);
    l.setAdapter(adapter);
    l.setOnItemClickListener(this);
}

@Override
public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
    TextView temp = (TextView) view;
    Toast.makeText(this, "You clicked " + temp.getText() + " at " + i,
        Toast.LENGTH_LONG).show();
}
}
```

Output

