

## Practical list 1

### Q-1

---

```
<?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=".pr1_textview"
```

```
    android:orientation="vertical"
```

```
>
```

```
<TextView
```

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

```
1"
```

```
    android:layout_width="match_paren
```

```
t"
```

```
    android:layout_height="wrap_conte
```

```
nt" android:text="UKA Tarsadia
```

```
University" android:textSize="20dp"
```

```
    android:layout_marginLeft="20dp"
```

```
    android:layout_marginRight="20dp"
```

```
    android:textColor="@color/black"/>
```

```
<TextView
```

```
    android:id="@+id/textView1"
```

```
    android:layout_width="match_paren
```

```
t" android:layout_height="1dp"
```

```
    android:text="TextView"
```

```
    android:background="@color/black"
```

```
/>
```

```

<TextView
    android:id="@+id/textView
    2"
    android:layout_width="match_paren
    t"
    android:layout_height="wrap_conte
    nt"
    android:text="Maliba Campus , \nGopal Vidyanagar , \nBardoli-Mahuva Road ,\nTarsadia -
    394 350.
\nDist:Surat \nGujarat, INDIA."
    android:textSize="20dp"
    android:layout_marginLeft="20dp
    "
    android:layout_marginRight="20d
    p"
    android:textColor="@color/black"
/>

```

```

<TextView
    android:id="@+id/textViewI2"
    android:layout_width="match_paren
    t" android:layout_height="1dp"
    android:text="TextView"
    android:background="@color/black"
/>

```

```

<TextView
    android:id="@+id/textView
    3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="+91 2625 290020 \n +91 2625
    290074" android:textSize="20dp"
    android:layout_marginLeft="20dp"

```

```
android:layout_marginRight="20dp"  
android:textColor="@color/black"/>
```

```
<TextView
```

```

        android:id="@+id/textView13"
        android:layout_width="match_paren
t" android:layout_height="1dp"
        android:text="TextView"
        android:background="@color/black"
    />

```

```
</LinearLayout>
```

## Practical list 2

```

<?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=".pr2_layout2"
    android:orientation="vertical"
    android:layout_marginTop="200d
p" android:padding="8dp">

```

```

<LinearLayout
    android:layout_width="wrap_content
"
    android:layout_height="wrap_conte
nt" android:orientation="horizontal"
    tools:context=".pr2_layout2" >

```

```
<Button
```

```
android:id="@+id/button"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
android:text="DHONI"
android:padding="15dp"/>
```

```
<Button
    android:id="@+id/button2"
    android:layout_width="108dp"
    android:layout_height="wrap_content"
    android:text="SACHIN"
    android:padding="15dp"/>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="wrap_content"
    "
    android:layout_height="wrap_content"
    tools:context=".pr2_layout2"
    android:orientation="horizontal">
```

```
<Button
    android:id="@+id/button5"
    android:layout_width="215dp"
    p"
    android:layout_height="wrap_content"
    android:text="YUVRAJ"
    android:padding="15dp"/>
```

```
<Button
    android:id="@+id/button6
```



```
        android:layout_width="194dp"
        android:layout_height="wrap_content"
        android:text="VIRAT"
    />
```

```
</LinearLayout>
```

```
<LinearLayout
```

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

```
    android:layout_height="wrap_content"
    tools:context=".pr2_layout2"
    android:orientation="horizontal">
```

```
<Button
```

```
    android:id="@+id/button3"
    android:layout_width="272dp"
    p"
    android:layout_height="wrap_content"
    android:text="HARBHAJAN"
    android:padding="15dp"/>
```

```
<Button
```

```
    android:id="@+id/button4"
    android:layout_width="133dp"
    p"
    android:layout_height="wrap_content"
    android:text="RAHUL" />
```

```
</LinearLayout>
```

```
</LinearLayout>
```

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

```
<RelativeLayout
```

```
    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"
s" android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".pr2_layout1">
```

```
<ImageView
    android:id="@+id/imageView4"
    android:layout_width="123dp"
    android:layout_height="128dp"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="254dp"
    android:layout_marginBottom="569dp"
    app:srcCompat="@android:mipmap/sym_def_app_icon" />
```

```
<ImageView
    android:id="@+id/imageView5"
    android:layout_width="123dp"
    android:layout_height="130dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="144dp"
    android:layout_marginEnd="144dp"
    android:layout_marginBottom="320dp"
    app:srcCompat="@android:mipmap/sym_def_app_icon" />
```

```
<ImageView
    android:id="@+id/imageView
    8"
    android:layout_width="120dp
    "
```



```
android:layout_height="123dp"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="33dp"
android:layout_marginBottom="37dp"
app:srcCompat="@android:mipmap/sym_def_app_ico
n" />
```

</RelativeLayout>

---

## Practical list 3

Q-2

=====

XML file

=====

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

```
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"
```

```
xmlns:app="http://schemas.android.com/apk/res-
auto"
```

```
xmlns:tools="http://schemas.android.com/tools"
```

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

```
android:layout_height="match_parent"
```

```
tools:context=".MainActivity">
```

```
<TextView
```

```
android:id="@+id/textView"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
android:text="Calculator"
android:textSize="30sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintHorizontal_bias="0.498"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.047" />
```

<EditText

```
android:id="@+id/editText"
1"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="textPersonName"
android:text="Enter number 1"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.139" />
```

<EditText

```
android:id="@+id/editText"
2"
```

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="textPersonName"
android:text="Enter number 2"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.23" />
```

<Button

```
android:id="@+id/add"
android:layout_width="66dp"
android:layout_height="51dp"
android:text="+"
android:textSize="18sp"
app:backgroundTint="#737171"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.078"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.346"
app:rippleColor="#A89696" />
```

<Button

```
android:id="@+id/div"
android:layout_width="66dp"
android:layout_height="51dp"
android:text="/"
android:textSize="18sp"
app:backgroundTint="#7371
71"
app:layout_constraintBottom_toBottomOf="pare
nt" app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.907"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.345"
app:rippleColor="#A89696" />
```

<Button

```
android:id="@+id/mul"
android:layout_width="66dp"
android:layout_height="51dp"
android:text="*"
android:textSize="18sp"
app:backgroundTint="#7371
71"
app:layout_constraintBottom_toBottomOf="pare
nt" app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.634"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.345"
app:rippleColor="#A89696" />
```

```
<Button
    android:id="@+id/su
    b"
    android:layout_width="66dp"
    android:layout_height="51dp"
    " android:text="-"
    android:textSize="18sp"
    app:backgroundTint="#7371
    71"
    app:layout_constraintBottom_toBottomOf="pare
    nt" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.356"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.345"
    app:rippleColor="#A89696" />
```

```
<TextView
    android:id="@+id/textView
    2"
    android:layout_width="wrap_content
    "
    android:layout_height="wrap_conte
    nt" android:text="Answer:"
    android:textSize="24sp"
    app:layout_constraintBottom_toBottomOf="pare
    nt" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.236"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.457" />
```

```
<TextView
```

```
android:id="@+id/answer"
android:layout_width="157dp"
android:layout_height="38dp"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.736"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.453" />
```

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

```
=====
Java file
=====
```

```
package com.example.pr3_q2;

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 {

    EditText e1,e2;
```

```
TextView t1;
```

```
Button
```

```
a1,sub1,m1,d1; int
```

```
num1,num2;
```

```
@Override
```

```
protected void onCreate(Bundle
```

```
    savedInstanceState) {
```

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

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

```
    e1=findViewById(R.id.editTex
```

```
    t1);
```

```
    e2=findViewById(R.id.editTex
```

```
    t2);
```

```
    t1=findViewById(R.id.answer)
```

```
    ;
```

```
    a1=findViewById(R.id.add)
```

```
    ;
```

```
    sub1=findViewById(R.id.su
```

```
    b);
```

```
    m1=findViewById(R.id.mul
```

```
    );
```

```
    d1=findViewById(R.id.div);
```

```
    onclick();
```

```
}
```

```
public void onclick(){
```

```
    a1.setOnClickListener(new
```

```
        View.OnClickListener() { @Override
```

```
public void onClick(View v) {  
    String  
    s1=e1.getText().toString();  
    String  
    s2=e2.getText().toString();  
    if((s1.equals(null) && s2.equals(null)) || (s1.equals("") && s2.equals("")))}
```



```

    {
        String result="Please enter
        value"; t1.setText(result);
    }
    else
    {
        num1=Integer.parseInt(e1.getText().toString
        ());
        num2=Integer.parseInt(e2.getText().toString
        ()); int sum=num1+num2;
        t1.setText(Integer.toString(sum));
    }
}
});
sub1.setOnClickListener(new
View.OnClickListener() { @Override
public void onClick(View v) {
    String
    s1=e1.getText().toString();
    String
    s2=e2.getText().toString();
    if((s1.equals(null) && s2.equals(null)) || (s1.equals("") && s2.equals("")))
    {
        String result="Please enter
        value"; t1.setText(result);
    }
    else
    {
        num1=Integer.parseInt(e1.getText().toString
        ());
        num2=Integer.parseInt(e2.getText().toString
        ()); int sum=num1-num2;
        t1.setText(Integer.toString(sum));
    }
}
});

```

```

    }
}

});

m1.setOnClickListener(new
    View.OnClickListener() { @Override
    public void onClick(View v) {
        String
        s1=e1.getText().toString();
        String
        s2=e2.getText().toString();
        if((s1.equals(null) && s2.equals(null)) || (s1.equals("") && s2.equals("")))
        {
            String result="Please enter
            value"; t1.setText(result);
        }
        else
        {
            num1=Integer.parseInt(e1.getText().toString
            ());
            num2=Integer.parseInt(e2.getText().toString
            ()); int sum=num1*num2;
            t1.setText(Integer.toString(sum));
        }
    }
});

d1.setOnClickListener(new
    View.OnClickListener() { @Override
    public void onClick(View v) {
        String
        s1=e1.getText().toString();
        String

```

```
s2=e2.getText().toString();
```

```

        if((s1.equals(null) && s2.equals(null)) || (s1.equals("") && s2.equals("")))
        {
            String result="Please enter
            value"; t1.setText(result);
        }
        else
        {
            num1=Integer.parseInt(e1.getText().toString());
            num2=Integer.parseInt(e2.getText().toString());
            double sum=num1/num2;
            t1.setText(Double.toString(sum));
        }
    }

});
}
}

```

Q-3

XML FILE

```

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"

xmlns:app="http://schemas.android.com/apk/res-
auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout_width="match_parent"

android:layout_height="match_parent"

```

```
tools:context=".MainActivity">
```

```
<TextView
```

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

```
    "
```

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

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

```
    android:text="Select any one Course:"
```

```
    android:textSize="24sp"
```

```
    app:layout_constraintBottom_toBottomOf="pare
```

```
nt" app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.208"
```

```
    app:layout_constraintStart_toStartOf="parent"
```

```
    app:layout_constraintTop_toTopOf="parent"
```

```
    app:layout_constraintVertical_bias="0.041" />
```

```
<RadioGroup
```

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

```
    "
```

```
    android:layout_width="295dp
```

```
    "
```

```
    android:layout_height="283d
```

```
p"
```

```
    app:layout_constraintBottom_toBottomOf="pare
```

```
nt" app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.301"
```

```
    app:layout_constraintStart_toStartOf="parent"
```

```
    app:layout_constraintTop_toTopOf="parent"
```

```
    app:layout_constraintVertical_bias="0.169">
```

```
<RadioButton
```

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

```
    android:layout_width="match_paren
```

t"

```
    android:layout_height="wrap_content"
    android:text="MScIT"
    android:textSize="18sp" />
```

```
<RadioButton
    android:id="@+id/radioButton2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="BCA"
    android:textSize="18sp" />
```

```
<RadioButton
    android:id="@+id/radioButton3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="BBA"
    android:textSize="18sp" />
```

```
<RadioButton
    android:id="@+id/radioButton4"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="MBA"
    android:textSize="18sp" />
```

```
</RadioGroup>
```

```
<Button
    android:id="@+id/click"
    k"
```

```

        android:layout_width="wrap_content"
        "
        android:layout_height="wrap_conte
        nt" android:text="Submit"
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="pare
        nt" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.579" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

## JAVA FILE

```

package com.example.radiobutton;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import
    android.widget.Button;
import
    android.widget.RadioButton;
import
    android.widget.RadioGroup;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    RadioGroup radiogroup;

```



Button

click;

@Override

protected void onCreate(Bundle

savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

click=findViewById(R.id.click);

radiogroup=findViewById(R.id.radiogro  
up);

radio();

onclick()

;

}

public void radio(){

radiogroup.setOnCheckedChangeListener(new

RadioGroup.OnCheckedChangeListener() { @Override

public void onCheckedChanged(RadioGroup group, int checkedId) {

RadioButton

radioButton=(RadioButton)group.findViewById(checkedId);

}

});

}

public void onclick(){

click.setOnClickListener(new

View.OnClickListener() { @Override

public void onClick(View v) {

int

selectedId=radiogroup.getCheckedRadioButtonId(

); if(selectedId == -1)



```

        Toast.makeText(getApplicationContext(),"No
course is selected",Toast.LENGTH_LONG).show();
    }
    else
    {
        RadioButton radiobutton=(RadioButton)radiogroup.findViewById(selectedId);
        Toast.makeText(getApplicationContext(),radiobutton.getText(),Toast.LENGTH_LONG
        ).show();
    }
}
});
}
}

```

Q-4

XML FILE

```

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"

xmlns:app="http://schemas.android.com/apk/res-
auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout_width="match_parent"

android:layout_height="match_parent"

tools:context=".MainActivity">

<TextView

    android:layout_width="wrap_content

    "

    android:layout_height="wrap_conte

```

```
nt" android:text="Select Option:"  
android:textSize="30sp"
```

```
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintHorizontal_bias="0.231"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.056" />
```

<CheckBox

```
android:id="@+id/checkBox"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Iphone"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.164"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.143" />
```

<CheckBox

```
android:id="@+id/checkBox2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Android"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.168"
```

```
app:layout_constraintStart_toStartOf="parent"
"
app:layout_constraintTop_toTopOf="parent"
"
app:layout_constraintVertical_bias="0.225"
/>
```

<CheckBox

```
android:id="@+id/checkBox3"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
" android:text="Windows"
android:textSize="24sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.177"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.307" />
```

<Button

```
android:id="@+id/click"
android:layout_width="wrap_content"
"
android:layout_height="wrap_content"
" android:text="Submit"
android:textSize="30sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.498"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
```

```
app:layout_constraintVertical_bias="0.457" />
```

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

## JAVA FILE

```
package com.example.pr_3_q4;
```

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

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

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

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

```
import
```

```
android.widget.CheckBox;
```

```
import android.widget.Toast;
```

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

```
    CheckBox
```

```
    ch1,ch2,ch3; Button
```

```
    click; @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

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

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

```
        ch1=findViewById(R.id.checkBo
```

```
        x);
```

```
        ch2=findViewById(R.id.checkBo
```

```
        x2);
```

```
        ch3=findViewById(R.id.checkBo
```

```
        x3);
```

```
        click=findViewById(R.id.click);
```



```
click();
```

```
}
```

```
public void click(){  
    click.setOnClickListener(new  
        View.OnClickListener() { @Override
```

```
public void onClick (View v){  
    String msg = "You  
checked:";
```

```
    if (ch1.isChecked()) {  
        msg = msg +  
            "Iphone";
```

```
    }
```

```
    if (ch2.isChecked()) {  
        msg = msg + "Android";  
    }
```

```
    if (ch3.isChecked()) {  
        msg = msg + "Windows";  
    }
```

```
        Toast.makeText(getApplicationContext(), msg, Toast.LENGTH_LONG).show();  
    }  
});  
}
```

```
}
```

## Practical list 4

q-2

=====

=== XML FILE

activity\_progressbar\_activity.xml

=====

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

```
<androidx.constraintlayout.widget.ConstraintLayout  
xmlns:android="http://schemas.android.com/apk/res/andro  
id"
```

```
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=".progressbar_activity">
```

```
<ProgressBar
```

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

```
ar"
```

```
style="?android:attr/progressBarStyleHorizon
```

```
tal" android:layout_width="0dp"
```

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

```
android:max="100"
```

```
android:progress="1"
```

```
app:layout_constraintBottom_toBottomOf="pare  
nt" app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.0"
```

```
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent"
```

```
app:layout_constraintVertical_bias="0.269" />
```

```

<TextView
    android:id="@+id/txtview"
    "

    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.045"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.396" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

=====

=== JAVA FILE

progressbar\_activity.java

=====

```
package com.example.image_selector;
```

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

```
import
```

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

```
import
```

```
android.os.Handler;
```

```
import
```

```
android.widget.ProgressBar;
```

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

```
public class progressbar_activity extends
```

```
    AppCompatActivity {
        ProgressBar progress;
```

TextView

txtview; int

status=0;

private Handler handler=new Handler();

@Override

protected void onCreate(Bundle savedInstanceState)

{ super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_progressbar\_acti  
vity); Initialization();

}

private void Initialization()

{

progress =

findViewById(R.id.progressbar);

txtview = findViewById(R.id.txtview);

new Thread(new

Runnable() { @Override

public void run() {

while(status<10

0)

{

status+=1;

handler.post(new

Runnable() { @Override

public void run() {

progress.setProgress(stat

us);

txtview.setText(status+"/"+ progress.getMax());

}

```
});  
try {  
    Thread.sleep(200);  
} catch (InterruptedException  
    e) { e.printStackTrace();  
}  
}  
}  
}).start();  
}  
}
```

Output





## Q-6

=====

=== XML FILE

activity\_main.xml

=====

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

```
<androidx.constraintlayout.widget.ConstraintLayout  
xmlns:android="http://schemas.android.com/apk/res/andro  
id"
```

```
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">
```

```
<Button
```

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

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

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

```
android:text="Next"
```

```
app:layout_constraintBottom_toBottomOf="pare  
nt" app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.767"
```

```
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent"
```

```
app:layout_constraintVertical_bias="0.713" />
```

```
<ImageSwitcher
```

```
android:id="@+id/imgbrand"
android:layout_width="match_parent"
android:layout_height="wrap_content"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.0"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.207" />
```

<Button

```
android:id="@+id/previous"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Previous"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.141"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.713" />
```

</androidx.constraintlayout.widget.ConstraintLayout>

=====

Java file

MainActivity.jav

a

=====

package com.example.image\_selector;

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

```
import
```

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

```
import
```

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

```
import android.view.animation.Animation;
```

```
import
```

```
android.view.animation.AnimationUtils;
```

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

```
import
```

```
android.widget.ImageSwitcher;
```

```
import android.widget.ImageView;
```

```
import
```

```
android.widget.ViewSwitcher;
```

```
public class MainActivity extends
```

```
    AppCompatActivity { ImageSwitcher imgbrand;
```

```
    Button btnprevious,btnnext;
```

```
    private int[]
```

```
    brand={R.drawable.b1,R.drawable.b2,R.drawable.b3,R.drawable.b4,R.drawable.b5}; int
```

```
    position=0;
```

```
@Override
```

```
protected void onCreate(Bundle
```

```
    savedInstanceState) {
```

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

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

```
    controlinitialization();
```

```
    Btnclick();
```

```
}
```

```
private void controlinitialization()
```

```

{
    imgbrand = findViewById(R.id.imgbrand);
    btnprevious = findViewById(R.id.previous);
    btnnext=findViewById(R.id.next);

    imgbrand.setFactory(new
        ViewSwitcher.ViewFactory() { @Override
        public View makeView() {
            ImageView imgmyview=new ImageView(getApplicationContext());

            imgmyview.setImageResource(brand[positi
on]); return imgmyview;
        }
    });

}

private void Btnclick()
{
    btnnext.setOnClickListener(new
        View.OnClickListener() { @Override
        public void onClick(View v)
        { if(position <
            brand.length-1)
                position++
            ; else
                position=0;
            imgbrand.setImageResource(brand[positio
n]);
        }
    });
}

```

```
btnprevious.setOnClickListener(new
    View.OnClickListener() { @Override
        public void onClick(View
            v) { if(position>0)
                position--;
            else if(position ==
                brand.length) position=0;
            imgbrand.setImageResource(brand[position]);
        }
    });
    Animation obj = AnimationUtils.loadAnimation(getApplicationContext(),
    android.R.anim.fade_in); imgbrand.setInAnimation(obj);
}
}
```









q-4

Activity\_main.xml

```
package com.example.datetime;
```

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

```
import
```

```
android.content.Intent;
```

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

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

```
import
```

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

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

```
    Button
```

```
    btnDate, btnTime, btnDefault, btnCustom;
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

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

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

```
        btnDate=findViewById(R.id.btnDate);
```

```
        btnTime=findViewById(R.id.btnTime);
```

```
        btnDefault=findViewById(R.id.btnDefault
```

```
    );
```

```
        btnCustom=findViewById(R.id.btnCustom
```

```
    ); Buttonclick();
```

```
}
```

```

private void Buttonclick()
{
    btndate.setOnClickListener(new
        View.OnClickListener() { @Override
        public void onClick(View v) {
            Intent obj=new Intent(getApplicationContext(),datepickerActivity.class);
            startActivity(obj);
        }
    });

    btnTime.setOnClickListener(new
        View.OnClickListener() { @Override
        public void onClick(View v) {
            Intent obj=new Intent(getApplicationContext(),TimepickerActivity.class);
            startActivity(obj);
        }
    });

    btndefault.setOnClickListener(new
        View.OnClickListener() { @Override
        public void onClick(View v) {
            Intent obj=new
            Intent(getApplicationContext(),DefaultActivity.class);
            startActivity(obj);
        }
    });

    btncustom.setOnClickListener(new
        View.OnClickListener() { @Override
        public void onClick(View v) {
            Intent obj=new
            Intent(getApplicationContext(),customActivity.class);
            startActivity(obj);
        }
    });
}

```

```
    }  
    });  
}  
}
```

MainActivity.java

```
package com.example.datetime;
```

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

```
import
```

```
android.content.Intent;
```

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

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

```
import
```

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

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

```
    Button
```

```
    btnDate, btnTime, btnDefault, btnCustom;
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

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

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

```
        btnDate=findViewById(R.id.btnDate);
```

```
        btnTime=findViewById(R.id.btnTime);
```

```
        btnDefault=findViewById(R.id.btnDefault
```

```
    );
```

```
        btnCustom=findViewById(R.id.btnCustom
```

```
m); Buttonclick();
```

```
}
```

```
private void Buttonclick()
```

```
{
```

```
    btndate.setOnClickListener(new
```

```
        View.OnClickListener() { @Override
```

```
            public void onClick(View v) {
```

```
                Intent obj=new Intent(getApplicationContext(),datepickerActivity.class);
```

```
                startActivity(obj);
```

```
            }
```

```
        });
```

```
    btnTime.setOnClickListener(new
```

```
        View.OnClickListener() { @Override
```

```
            public void onClick(View v) {
```

```
                Intent obj=new Intent(getApplicationContext(),TimepickerActivity.class);
```

```
                startActivity(obj);
```

```
            }
```

```
        });
```

```
    btndefault.setOnClickListener(new
```

```
        View.OnClickListener() { @Override
```

```
            public void onClick(View v) {
```

```
                Intent obj=new
```

```
                Intent(getApplicationContext(),DefaultActivity.class);
```

```
                startActivity(obj);
```

```
            }
```

```
        });
```

```
    btncustom.setOnClickListener(new
```

```
        View.OnClickListener() { @Override
```

```
            public void onClick(View v) {
```

```
                Intent obj=new Intent(getApplicationContext(),customActivity.class);
```

```

        startActivity(obj);
    }
    });
}
}

```

Date Picker xml file

Activity\_datepicker.x

ml

```

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"

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=".datepickerActivity">

<TextView
    android:id="@+id/txtDate"
    android:layout_width="366d
    p"

```

android:layout\_height="48dp

"

app:layout\_constraintBottom\_toBottomOf="pare

nt" app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.488"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"



```
app:layout_constraintVertical_bias="0.076" />
```

```
<Button
```

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

```
    "
```

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

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

```
    android:text="change Date"
```

```
    app:layout_constraintBottom_toBottomOf="parent"
```

```
    app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.424"
```

```
    app:layout_constraintStart_toStartOf="parent"
```

```
    app:layout_constraintTop_toTopOf="parent"
```

```
    app:layout_constraintVertical_bias="0.193" />
```

```
<DatePicker
```

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

```
    android:layout_width="356dp"
```

```
    "
```

```
    android:layout_height="450d
```

```
    p"
```

```
    app:layout_constraintBottom_toBottomOf="parent"
```

```
    app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.581"
```

```
    app:layout_constraintStart_toStartOf="parent"
```

```
    app:layout_constraintTop_toTopOf="parent"
```

```
    app:layout_constraintVertical_bias="1.0" />
```

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

```

datepickerActivity.java
package com.example.datetime;

import androidx.annotation.RequiresApi;
import androidx.appcompat.app.AppCompatActivity;

import
android.app.DatePickerDialog;
import android.icu.util.Calendar;
import android.os.Build;
import android.os.Bundle;
import android.view.View;
import
android.widget.Button;
import
android.widget.DatePicker;
import
android.widget.TextView;

public class datepickerActivity extends
    AppCompatActivity { TextView txtdate;
    Button change;
    DatePicker
    datePicker;
    int
    mYear,mMonth,mDay;
    @Override
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_datepicker);
        txtdate=findViewById(R.id.txtDate);
        change=findViewById(R.id.button);
    }
}

```

```
datePicker=findViewById(R.id.datepicker);  
controlInitiazliazation();
```

```

        ButtonClicks();
    }

    private void controllInitiazliazation()
    {

        txtdate.setText("Current date is ." + getCurrentDate());

    }

    public String getCurrentDate()
    {
        StringBuilder builder=new StringBuilder();
        builder.append(datePicker.getDayOfMonth()+"/"); builder.append((datePicker.getMonth()+ 1)
        +"/"); builder.append(datePicker.getYear());
        return builder.toString();

    }

    private void ButtonClicks()
    {
        change.setOnClickListener(new
        View.OnClickListener() { @RequiresApi(api =
        Build.VERSION_CODES.N) @Override
        public void onClick(View v) {
            //txtdate.setText("Change date is ." +
            getCurrentDate()); Calendar
            c=Calendar.getInstance();
            mYear=c.get(Calendar.YEAR);
            mMonth=c.get(Calendar.MONTH);

```

```
mDay=c.get(Calendar.DAY_OF_MONTH);
```

```
        DatePickerDialog dialog=new  
DatePickerDialog(datepickerActivity.this, new  
DatePickerDialog.OnDateSetListener() {  
            @Override  
            public void onDateSet(DatePicker view, int year, int month, int  
                day) { txtdate.setText("selected Date is :"+day+ "/" +(month+1)  
                    + "/" + year);  
            }  
  
            },mYear,mMonth,mDa  
y); dialog.show();  
    }  
});  
}  
}
```

Time picker

Xml file

Activity\_timpicker.xml

```
package com.example.datetime;

import androidx.annotation.RequiresApi;
import androidx.appcompat.app.AppCompatActivity;

import
android.app.DatePickerDialog;
import android.icu.util.Calendar;
import android.os.Build;
import android.os.Bundle;
import android.view.View;
import
android.widget.Button;
import
android.widget.DatePicker;
import
android.widget.TextView;

public class datepickerActivity extends
    AppCompatActivity { TextView txtdate;
    Button change;
    DatePicker
    datePicker;
    int
    mYear,mMonth,mDay;
    @Override
```

```
protected void onCreate(Bundle  
    savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_datepicker);  
    txtdate=findViewById(R.id.txtDate);  
    change=findViewById(R.id.button);
```

```

        datePicker=findViewById(R.id.datepick
er); controllInitiazliazation();
        ButtonClicks();
    }

```

```

private void controllInitiazliazation()
{

```

```

    txtdate.setText("Current date is : " + getCurrentDate());

}

```

```

public String getCurrentDate()
{
    StringBuilder builder=new StringBuilder();
    builder.append(datePicker.getDayOfMonth()+
"/"); builder.append((datePicker.getMonth()+ 1)
+""); builder.append(datePicker.getYear());
    return builder.toString();

}

```

```

private void ButtonClicks()
{
    change.setOnClickListener(new
        View.OnClickListener() { @RequiresApi(api =
        Build.VERSION_CODES.N) @Override
        public void onClick(View v) {
            //txtdate.setText("Change date is : " +
            getCurrentDate()); Calendar
            c=Calendar.getInstance();

```



```
mYear=c.get(Calendar.YEAR);
mMonth=c.get(Calendar.MONTH);
mDay=c.get(Calendar.DAY_OF_MONTH);
```

```
DatePickerDialog dialog=new
DatePickerDialog(datepickerActivity.this, new
DatePickerDialog.OnDateSetListener() {

    @Override

    public void onDateSet(DatePicker view, int year, int month, int
        day) { txtdate.setText("selected Date is : " +day+ "/" + (month+1)
            + "/" + year);
    }

    },mYear,mMonth,mDay);
dialog.show();
}
});
}
}
```

TimepickerActivity.java

```
package com.example.datetime;

import androidx.annotation.RequiresApi;
import androidx.appcompat.app.AppCompatActivity;

import
android.app.DatePickerDialog;
import
android.app.TimePickerDialog;
import android.icu.util.Calendar;
import android.os.Build;
```

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

```
import android.view.View;
import
android.widget.Button;
import
android.widget.DatePicker;
import android.widget.TextView;
import
android.widget.TimePicker;
```

```
public class TimepickerActivity extends
    AppCompatActivity { TextView txtTime;
    Button change;
    TimePicker
    timePicker; int
    mHour,mMinutes;
    @Override
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_timepicker);

        txtTime=findViewById(R.id.txtTime);
        change=findViewById(R.id.button);
        timePicker=findViewById(R.id.timepick
            er); controllInitiazliazation();
        ButtonClicks();

    }

    private void controllInitiazliazation()
    {

        txtTime.setText("Current Time is : " + getCurrentTime());
```

```
}
```

```
public String getCurrentTime()
{
    StringBuilder builder=new StringBuilder();
    builder.append(timePicker.getCurrentHour()+
    ":");
    builder.append(timePicker.getCurrentMinute()
    ); return builder.toString();
}
```

```
private void ButtonClicks()
{
    change.setOnClickListener(new
    View.OnClickListener() { @RequiresApi(api =
    Build.VERSION_CODES.N) @Override
    public void onClick(View v) {
        //txtTime.setText("change time is :" +
        getCurrentTime()); Calendar
        c=Calendar.getInstance();
        mHour=c.get(Calendar.HOUR);
        mMinutes=c.get(Calendar.MINUTE);
```

```
        TimePickerDialog dialog=new
        TimePickerDialog(TimepickerActivity.this, new
        TimePickerDialog.OnTimeSetListener() {
            @Override
            public void onTimeSet(TimePicker view, int hour, int
            minute) { String am_pm = (hour<12)? "AM" : "PM";
            txtTime.setText("selected Date is :" +hour+ ":" + minute + " "+am_pm);
```

```

        }
        },mHour,mMinutes,fals
        e); dialog.show();
    }
});
}
}

```

```

<LinearLayout android:layout_width="match_parent"
    android:layout_height="match_parent" android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">

```

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="57dp"
    android:layout_gravity="center"
    android:text="Success"
    android:textAlignment="center"
    android:textAppearance="@style/TextAppearance.AppCompat.Headline" />

```

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="43dp"
    android:layout_gravity="center"
    android:text="This is my Custome dialog demo"
    android:textAlignment="center"
    android:textAppearance="@style/TextAppearance.AppCompat.Medium" />

```

```

<Button
    android:layout_width="210dp"
    android:text="Done"

```

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

```
        android:layout_marginTop="15dp"
        android:textAlignment="center" />
</LinearLayout>
```

### Custom\_activity.java

```
package com.example.image_view;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;
import android.os.Bundle;
import android.text.AlteredCharSequence;
import android.view.LayoutInflater; import
android.view.View;
import android.view.ViewGroup;
import android.widget.Button;

public class Dailog_demo extends AppCompatActivity {

    Button btnDialog;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_dailog_demo);
        btnDialog=findViewById(R.id.btnDialog); btnClick();
    }
}
```

```

private void btnClick()
{
    btnDialog.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {

            //Default dialog box
            /*AlertDialog.Builder builder=new AlertDialog.Builder(Dailog_demo.this);
            builder.setMessage("Do you want to close the Application").setCancelable(false)
                .setPositiveButton("Yes", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        finish();
                    }
                })
                .setNegativeButton("No", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        dialog.cancel();
                    }
                });

            AlertDialog dialog=builder.create();
            dialog.setTitle("Alter Dialog Example");
            dialog.show();*/

            //Custom Dialog box
            AlertDialog.Builder builder=new AlertDialog.Builder(Dailog_demo.this);

```



```

        ViewGroup viewGroup=findViewById(android.R.id.content);

        View dialogView=
        LayoutInflater.from(v.getContext()).inflate(R.layout.custome_lyout,viewGroup,false);

        builder.setView(dialogView);

        AlertDialog dialog=builder.create();

        dialog.show();

    }

});

}

}

```

## Image switcher

```

=====
=== XML FILE
activity_main.xml
=====

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"

    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">

```

<Button

```
    android:id="@+id/next"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Next"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.767"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.713" />
```

<ImageSwitcher

```
    android:id="@+id/imgbrand"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.207" />
```

<Button

```
    android:id="@+id/previous"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Previous"
```

```
app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.141"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.713" />
```

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

```
=====
```

Java file

MainActivity.jav

a

```
=====
```

```
package com.example.image_selector;
```

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

```
import
```

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

```
import
```

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

```
import android.view.animation.Animation;
```

```
import
```

```
android.view.animation.AnimationUtils;
```

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

```
import
```

```
android.widget.ImageSwitcher;
```

```
import android.widget.ImageView;
```

```
import
```

```
android.widget.ViewSwitcher;
```

```
public class MainActivity extends
```

```
AppCompatActivity { ImageSwitcher imgbrand;  
Button btnprevious,btnnext;
```

```
private int[]  
brand={R.drawable.b1,R.drawable.b2,R.drawable.b3,R.drawable.b4,R.drawable.b5}; int  
position=0;
```

```
@Override
```

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

```
private void controlinitialization()  
{  
    imgbrand = findViewById(R.id.imgbrand);  
    btnprevious = findViewById(R.id.previous);  
    btnnext=findViewById(R.id.next);
```

```
imgbrand.setFactory(new  
    ViewSwitcher.ViewFactory() { @Override  
    public View makeView() {  
        ImageView imgmyview=new ImageView(getApplicationContext());  
  
        imgmyview.setImageResource(brand[positi  
on]); return imgmyview;  
    }  
});
```

```

    }
    private void Btnclick()
    {
        btnnext.setOnClickListener(new
            View.OnClickListener() { @Override
            public void onClick(View v)
            { if(position <
                brand.length-1)
                position++;
            ; else
                position=0;
            imgbrand.setImageResource(brand[positio
                n]);
            }
        });

        btnprevious.setOnClickListener(new
            View.OnClickListener() { @Override
            public void onClick(View
                v) { if(position>0)
                position--;
            else if(position ==
                brand.length) position=0;
            imgbrand.setImageResource(brand[position]);
            }
        });
        Animation obj = AnimationUtils.loadAnimation(getApplicationContext(),
            android.R.anim.fade_in); imgbrand.setInAnimation(obj);
    }
}

```

## PRACTICAL LIST 5

1.

Manifest file

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

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Welcome">
        <activity android:name=".hello">

        </activity>
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

Activity1.java

```
package com.example.welcome;
```

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

```
import
```

```
android.content.Intent;
```

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

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

```
import
```

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

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

```
    Button click;
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

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

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

```
        click=findViewById(R.id.click);
```

```
        click.setOnClickListener();
```

```
    }
```

```
    public void onclick(){
```

```
        click.setOnClickListener(new
```

```
            View.OnClickListener() { @Override
```



```
        public void onClick(View v) {  
            Intent intent = new  
            Intent(getApplicationContext(),hello.class);  
            startActivity(intent);  
        }  
    });  
}  
  
}
```

Activity2 java

```
package com.example.welcome;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class hello extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle  
        savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_hello);  
    }  
}
```

```
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"
```

```
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">
```

```
<Button
```

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

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

```
"
```

```
android:layout_height="wrap_conten
```

```
t" android:text="Welcome"
```

```
android:textSize="36sp"
```

```
app:layout_constraintBottom_toBottomOf="pare
```

```
nt" app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent"
```

```
app:layout_constraintVertical_bias="0.478" />
```

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

Activity2.xml

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

```
<androidx.constraintlayout.widget.ConstraintLayout
```

```
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=".hello">
```

```
<TextView  
    android:id="@+id/textVie  
    w"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    "        android:text="Hello....Good  
    Morining "  
    android:textSize="24sp"  
    app:layout_constraintBottom_toBottomOf="pare  
    nt" app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintHorizontal_bias="0.108"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toTopOf="parent"  
    app:layout_constraintVertical_bias="0.061" />
```

```
<TextView  
    android:id="@+id/textView  
    2"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Welcome to BMIT"  
    android:textSize="24sp"  
    app:layout_constraintBottom_toBottomOf="pare  
    nt" app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintHorizontal_bias="0.074"  
    app:layout_constraintStart_toStartOf="parent"
```

```

        app:layout_constraintTop_toTopOf="parent"
        "
        app:layout_constraintVertical_bias="0.124"
        " />
</androidx.constraintlayout.widget.ConstraintLayout
>

```

Q-2

Manifest file

```

<?xml version="1.0" encoding="utf-8"?>
<manifest
    xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.pr_5_q2">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Pr_5q2">
        <activity android:name=".display"></activity>
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

```

</manifest>

Activity1.xml

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

<androidx.constraintlayout.widget.ConstraintLayout  
xmlns:android="http://schemas.android.com/apk/res/andro  
id"

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">

<EditText

android:id="@+id/editview"

android:layout\_width="wrap\_conten

t"

android:layout\_height="wrap\_conte

nt" android:ems="10"

android:hint="Enter Name"

android:inputType="textPersonName"

android:textSize="24sp"

app:layout\_constraintBottom\_toBottomOf="pare

nt" app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.142" />

```
<Button
    android:id="@+id/click"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="OK"
    android:textSize="24sp"
    tools:layout_editor_absoluteX="153dp"
    tools:layout_editor_absoluteY="240dp"
/>
```

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

Activity2.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=".display">

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

Activity1.JAVA

```
package com.example.pr5_2;
```

```
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;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    Button click;
    EditText
    edittext;
    @Override
    protected void onCreate(Bundle
        savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        edittext=findViewById(R.id.editview);
        click=findViewById(R.id.click);
        onclick();
    }

    public void onclick()
    {
        click.setOnClickListener(new
            View.OnClickListener() { @Override
                public void onClick(View v) {
                    String name=edittext.getText().toString();
                    Intent obj=new
                        Intent(getApplicationContext(),display.class);
                    obj.putExtra("name",name);
                    startActivity(obj);
                }
            }
        );
    }
}

```



```
    }  
    });  
}  
}
```

Activity2.java

```
package com.example.pr_5_q2;
```

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

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

```
import
```

```
android.widget.Toast;
```

```
public class display extends AppCompatActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle
```

```
        savedInstanceState) {
```

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

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

```
        String name=getIntent().getStringExtra("name");
```

```
        Toast.makeText(getApplicationContext(),name,Toast.LENGTH_LONG)
```

```
            .show();
```

```
    }
```

```
}
```

---

Inbuilt menu program

XML FILE

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/andro
id"

    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">

    <Button
        android:id="@+id/btninbuilt
        "
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="click here "
        app:layout_constraintBottom_toBottomOf="pare
        nt" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVAfile

```
package com.example.inbuilt_application;
```

```
import
```

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

```
import androidx.core.app.ActivityCompat;
```

```

import android.Manifest;
import
android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import
android.widget.Button;

public class MainActivity extends AppCompatActivity {

    Button b1;

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

    public void initialize()
    {
        b1 =findViewById(R.id.btninbuilt);

        //ActivityCompat.requestPermissions(this,new
        String[]{Manifest.permission.CALL_PHONE},0);
    }

    private void buttonclicks()
    {
        b1.setOnClickListener(new

```

```
View.OnClickListener() { @Override
```

```

public void onClick(View v) {
    /*Intent objIntent=new Intent(Intent.ACTION_VIEW);
    objIntent.putExtra("sms_body","good morning...This is in-built sms
    demo"); objIntent.putExtra("address","9825569665");
    objIntent.setType("vnd.android-dir/mms-sms");
    objIntent.setData(Uri.parse("smsto:"));
    startActivity(objIntent);*/

    //TO call
    /*Intent objIntent = new Intent(Intent.ACTION_DIAL,Uri.parse("tel:9825569665"));
    //startActivity(objIntent);*/

    //open im-built browser
    /*Intent objIntent=new Intent(Intent.ACTION_VIEW,Uri.parse("http://www.google.com"));
    startActivity(objIntent);*/

    //open google map

    /* Intent objIntent=new
    Intent(Intent.ACTION_VIEW,Uri.parse("geo:21.1591425,72.6822102"));
    startActivity(objIntent);*/

    //call log
    /* Intent objIntent=new
    Intent(Intent.ACTION_VIEW,Uri.parse("content://call_log/calls"));
    startActivity(objIntent);*/

    //view contact
    /*Intent objIntent=new
    Intent(Intent.ACTION_VIEW,Uri.parse("content://contacts/people/10"));

```

```

startActivity(objIntent);*/

//Email sending

Intent objIntent=new Intent(Intent.ACTION_SENDTO);
// objIntent.setType("message/rfc822");
objIntent.setData(Uri.parse("mailto:"));
objIntent.putExtra(Intent.EXTRA_EMAIL,new
String[]{"18bmiit036@gmail.com"});
objIntent.putExtra(Intent.EXTRA_SUBJECT,"Android Email In-built intent
demo"); objIntent.putExtra(Intent.EXTRA_TEXT,"Hello Everyone. !!");
startActivity(objIntent);

}
});
}
}

```

Manifest file

```

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

<uses-permission android:name="android.permission.CALL_PHONE"/>

<application
    android:allowBackup="true"
    android:icon="@mipmap/ic_launcher"
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportRtl="true"
    android:theme="@style/AppTheme">

```

```
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round" android:supportRtl="true"
    android:theme="@style/Theme.Inbuilt_application">
    <activity android:name=".MainActivity">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

activity\_main.xml file

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

<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
id="
    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">

    <ImageView
        android:id="@+id/imageView"
        "
        android:layout_width="379dp
        "
        android:layout_height="303d
        p"
        app:layout_constraintBottom_toBottomOf="pare
        nt" app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button"
        "
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button"
        app:layout_constraintBottom_toBottomOf="paren
        t" app:layout_constraintStart_toStartOf="parent"
        />

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



=====

zoom.xml

```
=====
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <scale
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:fromXScale="0.5"
    android:toXScale="3.0"
    android:fromYScale="0.
5"
    android:toYScale="3.0"
    android:duration="5000
" android:pivotX="50%"
    android:pivotY="50%"/>

  <scale
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:fromXScale="3.0"
    android:toXScale="0.5"
    android:fromYScale="3.0"
    android:toYScale="0.5"
    android:duration="5000"
    android:pivotX="50%"
    android:pivotY="50%"
    android:startOffset="5000"/
  >

</set>
=====
```

rotate.xml

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

```

<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate xmlns:android="http://schemas.android.com/apk/res/android"

        android:fromDegrees="0
        "
        android:toDegrees="360"
        android:pivotX="50%"
        android:pivotY="50%"
        android:duration="5000"/
    >
    <rotate xmlns:android="http://schemas.android.com/apk/res/android"

        android:fromDegrees="360
        " android:toDegrees="0"
        android:pivotX="50%"
        android:pivotY="50%"
        android:duration="5000"
        android:startOffset="5000"/
    >

</set>

```

```

=====
fade.xml
=====
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
<alpha
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:fromAlpha="0"
    android:toAlpha="1"
    android:duration="2000"/
>

```

```
<alpha
  xmlns:android="http://schemas.android.com/apk/res/android"
  android:fromAlpha="1"
  android:toAlpha="0"
  android:duration="2000"
  android:startOffset="2000"/
  >
```

```
</set>
```

```
=====
```

```
translate.xml
```

```
=====
```

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

```
<set xmlns:android="http://schemas.android.com/apk/res/android">
```

```
  <translate
```

```
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:fromXDelta="0%"
    android:toXDelta="75%"
    android:duration="800"/>
```

```
  <translate
```

```
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:fromYDelta="75%"
    android:toYDelta="0%"
    android:duration="800"
    android:startOffset="800"/
```

```
  >
```

```
</set>
```

```
=====
```

```
blink.xml
```

```
=====
```

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

```
<set xmlns:android="http://schemas.android.com/apk/res/android">
```

```
  <alpha
```

```
    xmlns:android="http://schemas.android.com/apk/res/android"
```

```
    android:fromAlpha="0"
```

```
    android:toAlpha="1"
```

```
    android:duration="600"
```

```
    android:repeatMode="revers
```

```
e"
```

```
    android:repeatCount="10"/>
```

```
</set>
```

```
=====
```

```
frame_anim_list.xml
```

```
=====
```

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

```
<animation-list
```

```
  xmlns:android="http://schemas.android.com/apk/res/android">
```

```
  android:onshot="false">
```

```
    <item android:drawable="@drawable/t1" android:duration="300"></item>
```

```
    <item android:drawable="@drawable/t2" android:duration="300"></item>
```

```
    <item android:drawable="@drawable/t3" android:duration="300"></item>
```

```
</animation-list>
```