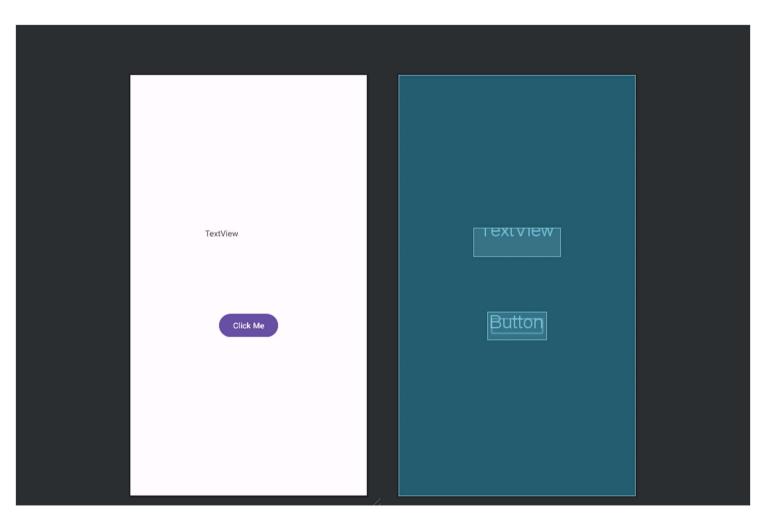
ANDROID APPLICATION PROGRAMMING

Assignment No.1

1) Write a Program to make Android application which having simple activity to shows any Message in TextView when click on Button "Click Me."

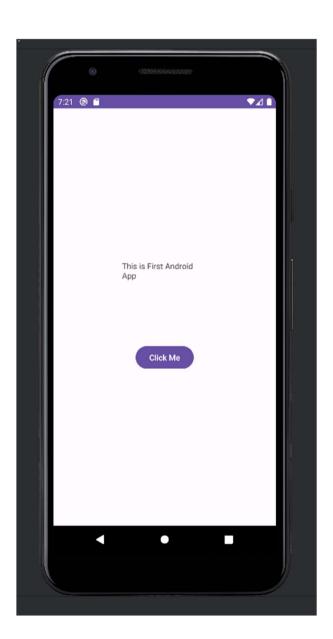


```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
   public Button bt1;
   public TextView tv1;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
```

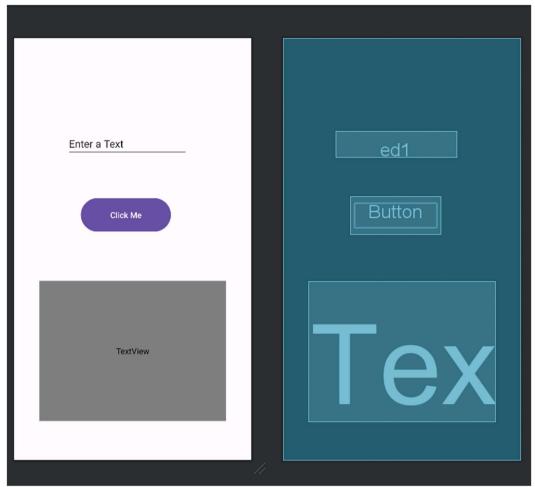
```
bt1=(Button)findViewById(R.id.bt1);

tv1=(TextView)findViewById(R.id.tv1);

bt1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        tv1.setText("This is First Android App");
    }
});
```



2) Write a Program to make Android application which accept string by EdiText and print that string in Uppercase, Bold, Size = 64dp, Center Alignment, Change Text Color when you click on Show Button.



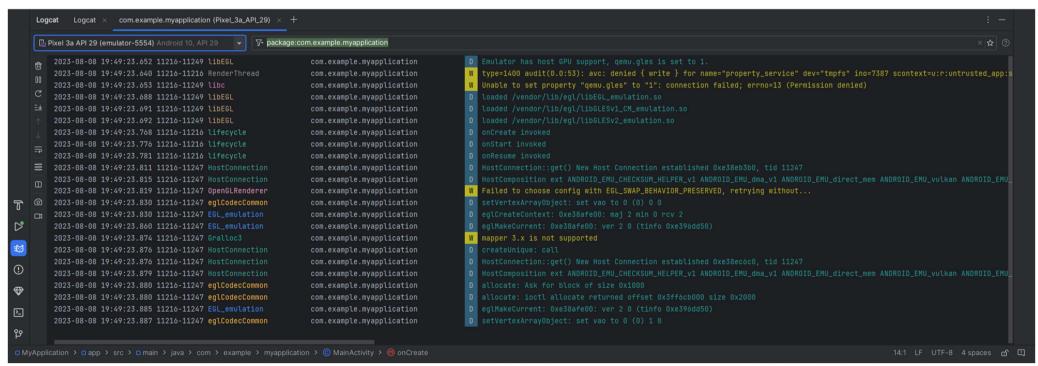
import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText; import android.widget.TextView; public class MainActivity extends AppCompatActivity { public Button mybtn; public TextView mytv1; public EditText myed; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main); mybtn=(Button)findViewById(R.id.btn1); mytv1=(TextView)findViewById(R.id.tv1);

```
myed=(EditText)findViewById(R.id.ed1);
mybtn.setOnClickListener(new View.OnClickListener() {
     @Override
     public void onClick(View v) {
        String s=myed.getText().toString();
        mytv1.setText(s);
     }
});
```

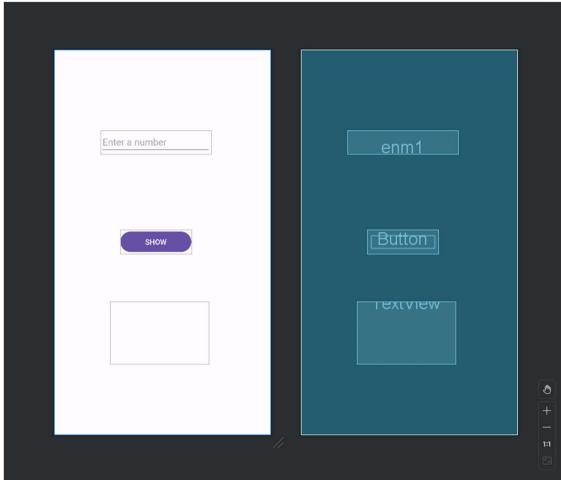


```
3) Write a Program to make Android application which shows use of all methods in Activity life cycle.
package example.javatpoint.com.activitylifecycle;
import android.app.Activity;
import android.os.Bundle;
import android.util.Log;
public class MainActivity extends Activity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    Log.d("lifecycle","onCreate invoked");
  @Override
  protected void onStart() {
    super.onStart();
    Log.d("lifecycle","onStart invoked");
  @Override
  protected void onResume() {
    super.onResume();
    Log.d("lifecycle","onResume invoked");
  @Override
  protected void onPause() {
    super.onPause();
    Log.d("lifecycle","onPause invoked");
  }
```

```
@Override
protected void onStop() {
  super.onStop();
  Log.d("lifecycle","onStop invoked");
@Override
protected void onRestart() {
  super.onRestart();
  Log.d("lifecycle","onRestart invoked");
@Override
protected void onDestroy() {
  super.onDestroy();
  Log.d("lifecycle","onDestroy invoked");
```



4) Write a Program to make Android application which accept the any number and finds square. Result display in TextView after click on Button Show.

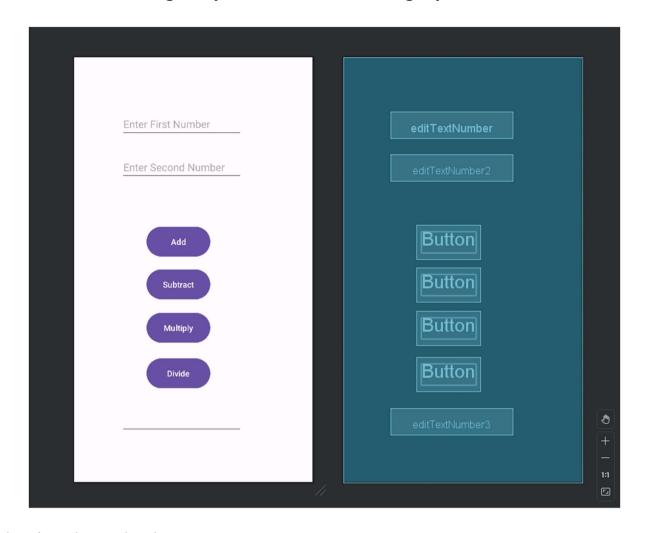


```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
  public Button mybtn;
  public TextView mytv1;
  public EditText myed;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    mybtn=(Button)findViewById(R.id.btn1);
    mytv1=(TextView)findViewById(R.id.tv1);
```

```
myed=(EditText)findViewById(R.id.enm1);
mybtn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        int n=Integer.parseInt(myed.getText().toString());
        int a=n*n;
        String s=String.valueOf(a);
        mytv1.setText(s);
        mytv1.setText("The square of " + n + " is " + s);
    }
});
}
```



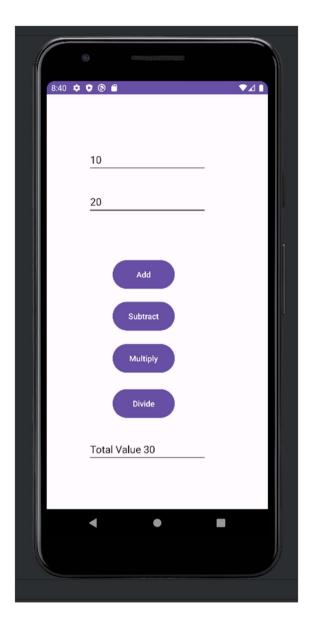
5) Write a Program to make Android application creates a simple calculator to make addition, subtraction, multiplication & division. which accept any two values and display results in EditText.



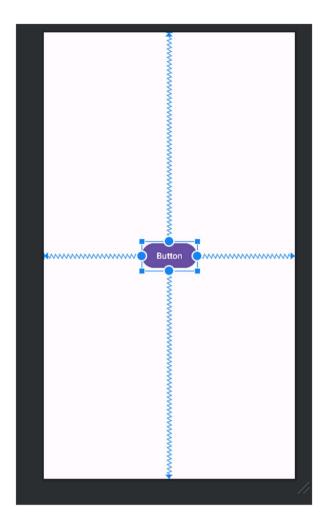
```
package com.example.simple_calculator;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
  public void Add(View v){
    EditText et1 =(EditText)findViewById(R.id.editTextNumber);
    EditText et2 =(EditText)findViewById(R.id.editTextNumber2);
    EditText et3 =(EditText)findViewById(R.id.editTextNumber3);
    int n1 = Integer.parseInt(et1.getText().toString());
```

```
int n2 = Integer.parseInt(et2.getText().toString());
  int result = n1+n2;
  et3.setText("Total Value " +result);
}
public void Subtract(View v){
  EditText et1 =(EditText)findViewById(R.id.editTextNumber);
  EditText et2 =(EditText)findViewById(R.id.editTextNumber2);
  EditText et3 =(EditText)findViewById(R.id.editTextNumber3);
  int n1 = Integer.parseInt(et1.getText().toString());
  int n2 = Integer.parseInt(et2.getText().toString());
  int result = n1-n2;
  et3.setText("Subtract Value " +result);
public void Multiply(View v){
  EditText et1 =(EditText)findViewById(R.id.editTextNumber);
  EditText et2 =(EditText)findViewById(R.id.editTextNumber2);
  EditText et3 =(EditText)findViewById(R.id.editTextNumber3);
  int n1 = Integer.parseInt(et1.getText().toString());
  int n2 = Integer.parseInt(et2.getText().toString());
  int result = n1*n2;
  et3.setText("Multiply Value " +result);
public void Divide(View v){
  EditText et1 =(EditText)findViewById(R.id.editTextNumber);
  EditText et2 =(EditText)findViewById(R.id.editTextNumber2);
  EditText et3 =(EditText)findViewById(R.id.editTextNumber3);
  int n1 = Integer.parseInt(et1.getText().toString());
```

```
int n2 = Integer.parseInt(et2.getText().toString());
int result = n1/n2;
et3.setText("Divide Value " +result);
}
```



6)Write a Program to make Android Application which open the URL:https:google.com" after click on Click Me Button (Use intent concept.)



```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.net.Uri;
import android.content.Intent;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
  public Button btn1;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    btn1=(Button) findViewById(R.id.mybtn);
    btn1.setOnClickListener(new View.OnClickListener() {
       @Override
```

```
public void onClick(View view) {
         Intent i=new Intent(Intent.ACTION_VIEW, Uri.parse("https://www.google.com"));
         startActivity(i);
     }
});
```

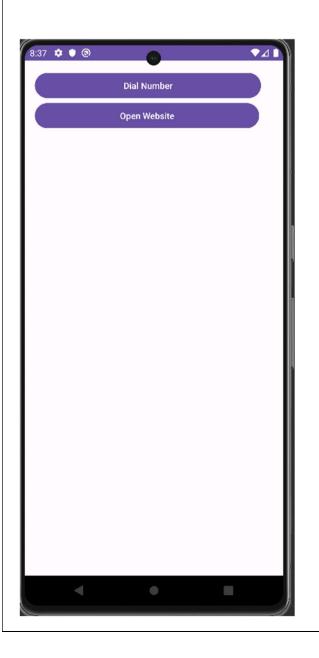


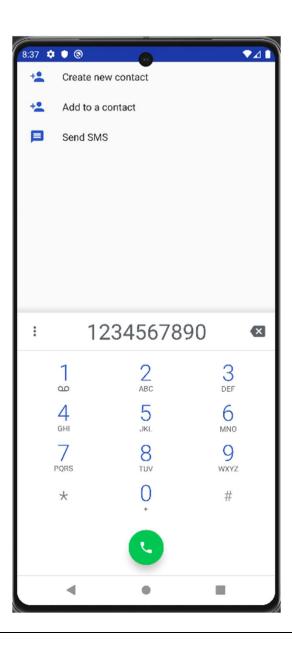
7)Write a program to make Android Application to call various built in application (to Dial number, to open http://www.amazon.com)

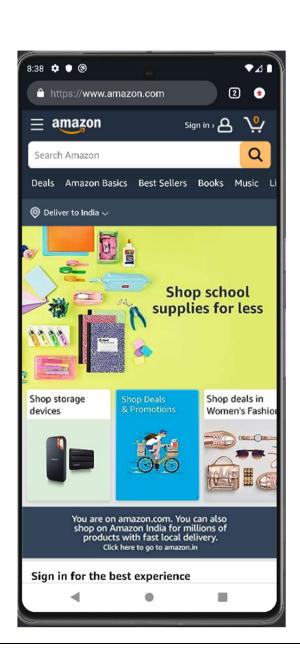


```
package com.example.yourappname;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    findViewById(R.id.btnDial).setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         dialNumber("1234567890"); // Replace with the desired phone number
       }
```

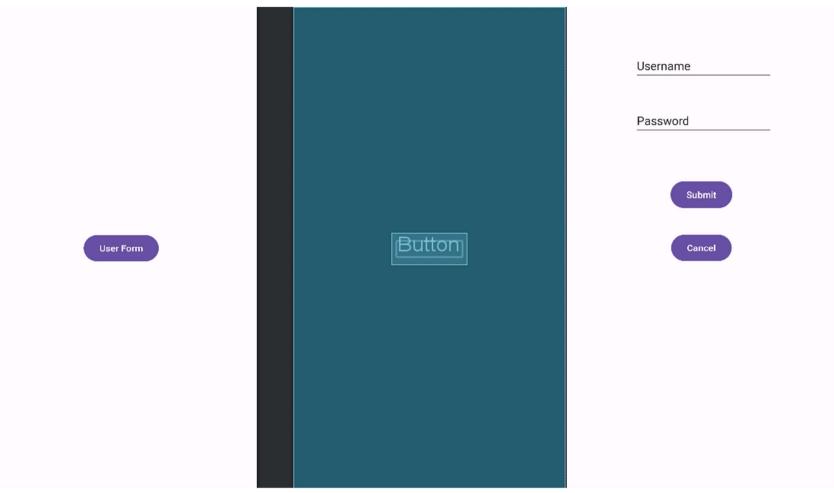
```
});
  findViewById(R.id.btnOpenWebPage).setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
       openWebPage("http://www.amazon.com");
  });
private void dialNumber(String phoneNumber) {
  Intent intent = new Intent(Intent.ACTION_DIAL, Uri.parse("tel:" + phoneNumber));
  startActivity(intent);
private void openWebPage(String url) {
  Intent intent = new Intent(Intent.ACTION_VIEW, Uri.parse(url));
  startActivity(intent);
}}
```





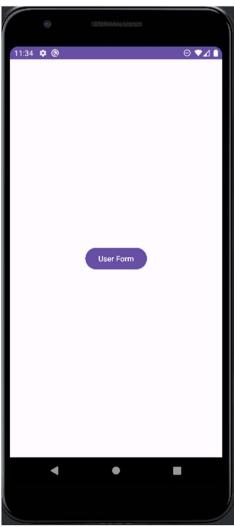


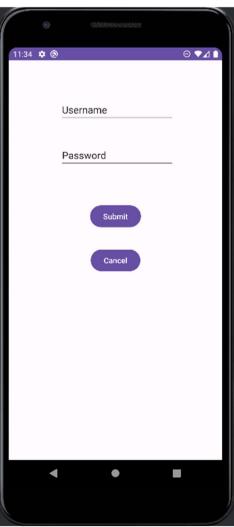
8)Write a Program to make Android Application to open Userdetails Form when click on Show Button (Use Intent Concept & UserDetails Form Contains Username, Password, Submit & Cancel Button).



```
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.content.Intent;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
  public Button mybtn;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    mybtn=(Button) findViewById(R.id.bt1);
    mybtn.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
```

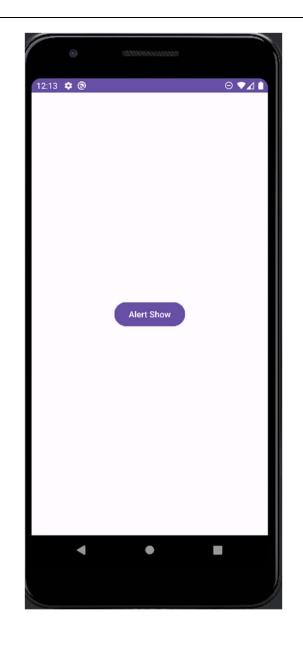
```
Intent i=new Intent(getApplicationContext(),userform.class);
         startActivity(i);
    });
userform.java
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class userform extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_userform);
```





9)Write a Program to Make Android Application which display alert dialog box having Yes & No Button after click on show Button. **Alert Show** package com.example.tybca_13214; import androidx.appcompat.app.AlertDialog; import androidx.appcompat.app.AppCompatActivity; import android.content.DialogInterface; import android.os.Bundle; import android.content.Intent; import android.view.View; import android.widget.Button; public class MainActivity extends AppCompatActivity { public Button mybtn; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main); mybtn=(Button) findViewById(R.id.bt1); mybtn.setOnClickListener(new View.OnClickListener() {

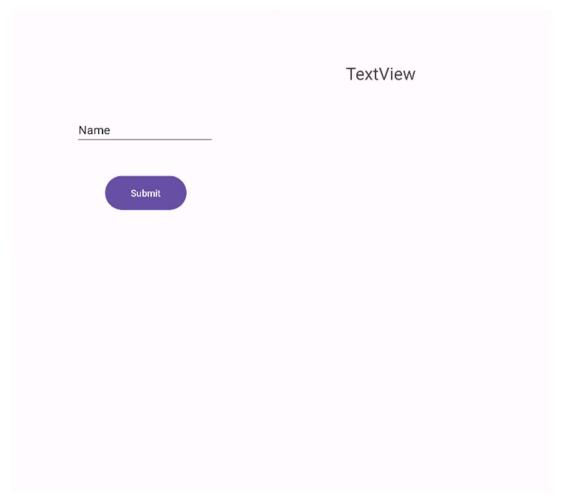
```
@Override
public void onClick(View view) {
  AlertDialog.Builder=new AlertDialog.Builder(MainActivity.this);
  builder.setMessage("Do you want to continue");
  builder.setTitle("Alert!");
  builder.setCancelable(false);
  builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
    @Override
    public void onClick(DialogInterface dialogInterface, int i) {
       dialogInterface.cancel();
  });
  builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
    @Override
    public void onClick(DialogInterface dialogInterface, int i) {
       dialogInterface.cancel();
  });
  AlertDialog alert=builder.create();
  alert.show();
```



10)Write a program to Make Android Application which uses fragment concept to create a two fragments in
single Activity.

Assignment No.2

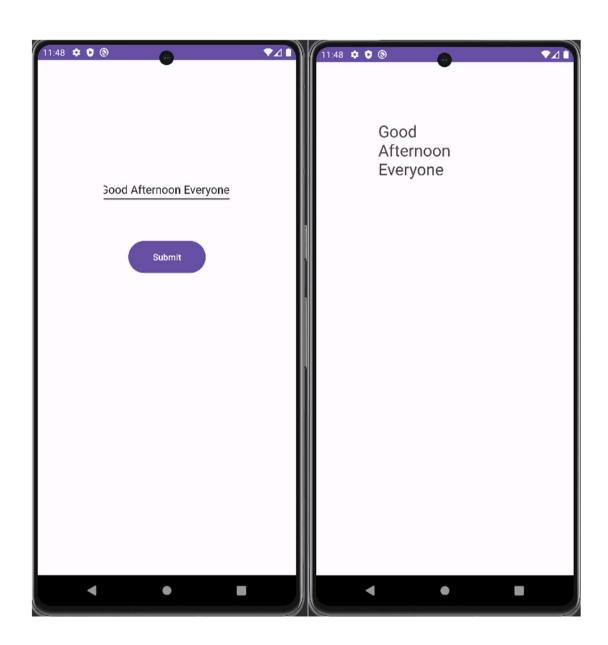
11) Create a simple application which accept any message form user and display that message into second activity with the help of intent.



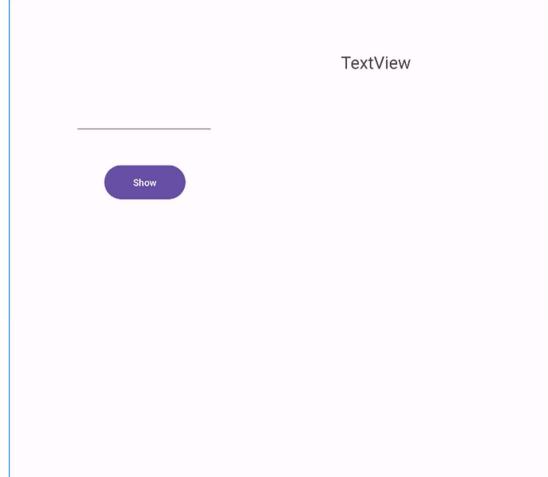
```
MainActivity.java
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
  public Button mybt;
  public EditText myed;
  @Override
  protected void onCreate(Bundle savedInstanceState){
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
```

```
mybt=(Button) findViewById(R.id.bt1);
    myed=(EditText) findViewById(R.id.ed1);
    myed.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         String str=myed.getText().toString();
         Intent i=new Intent(getApplicationContext(), second.class);
         i.putExtra("Message",str);
         startActivity(i);
    });
second.java
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
import android.content.Intent;
public class second extends AppCompatActivity {
  public TextView tv;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_second);
    tv=(TextView) findViewById(R.id.tv1);
```

```
Intent j=getIntent();
    String nstr=j.getStringExtra("Message");
    tv.setText(nstr);
}
```



12) Create a simple application which accept any +ve number from the user & display its reverse number into another activity with the help of intent.

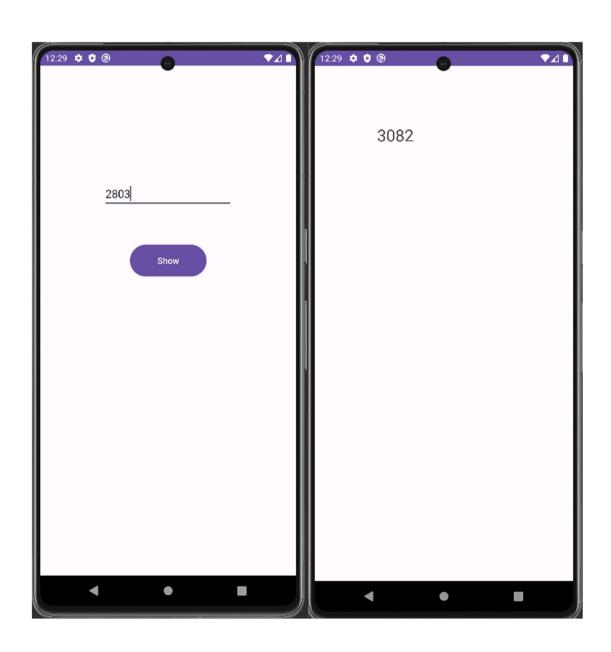


```
MainActivity.java
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
  public Button mybt;
  public EditText myed;
  @Override
  protected void onCreate(Bundle savedInstanceState){
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main);
    mybt=(Button) findViewById(R.id.bt1);
```

```
myed=(EditText) findViewById(R.id.ed1);
    mybt.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Integer rem;
         Integer rev=0;
         Integer n=Integer.parseInt(myed.getText().toString());
         while(n>0){
            rem=n%10;
            rev=rev*10+rem;
           n=n/10;
         String s=String.valueOf(rev);
         Intent i=new Intent(getApplicationContext(), second.class);
         i.putExtra("reverse",s);
         startActivity(i);
    });
second.java
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
import android.content.Intent;
```

```
public class second extends AppCompatActivity {
   public TextView mytv;
   @Override

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_second);
    mytv=(TextView) findViewById(R.id.tv1);
    Intent j=getIntent();
    String r=j.getStringExtra("reverse");
    mytv.setText(r);
}
```



13)Create a simple application which shows use of Radio Button. When Click on Radio Button it shows message into Toast. RadioButton RadioButton MainActivity.java package com.example.tybca_13214; import androidx.appcompat.app.AppCompatActivity; import android.content.Intent; import android.os.Bundle; import android.view.View.OnClickListener; import android.view.View; import android.widget.RadioButton; import android.widget.Toast; public class MainActivity extends AppCompatActivity { public RadioButton mrdo; public RadioButton frdo; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main);

```
mrdo = (RadioButton) findViewById(R.id.rdo1);
frdo = (RadioButton) findViewById(R.id.rdo2);
mrdo.setOnClickListener(radiolistener);
frdo.setOnClickListener(radiolistener);
}
private OnClickListener radiolistener=new OnClickListener(){
  @Override
  public void onClick(View view){
    RadioButton radioButton=(RadioButton) view;
    Toast.makeText(MainActivity.this,radioButton.getText(), Toast.LENGTH_LONG).show();;
}
};
```



```
14)Create a simple application which display simple alert dialog box having message "do you want to
continue?" with Yes & No Button.
package com.example.tybca_13214;
import android.content.DialogInterface;
import android.os.Bundle;
import android.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setTitle("Confirmation");
    builder.setMessage("Do you want to continue?");
    builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
       @Override
       public void onClick(DialogInterface dialog, int which) {
    });
    builder.setNegativeButton("No", new DialogInterface.OnClickListener() {
       @Override
       public void onClick(DialogInterface dialog, int which) {
         // Do something when the user clicks the "No" button
```

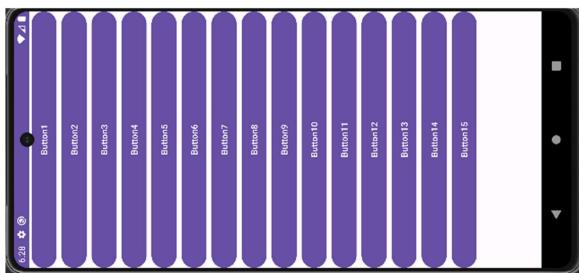
```
}
});
AlertDialog dialog = builder.create();
dialog.show();
}
```



```
15)Create a simple application which display scroll layout of 15 Button.(use LinearLayout to show all
Button)
<?xml version="1.0" encoding="utf-8"?>
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  tools:context=".MainActivity">
  <LinearLayout
  android:layout_width="fill_parent"
  android:layout_height="fill_parent"
  android:orientation="vertical">
    <Button
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button1"/>
    <Button
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button2"/>
    <Button
       android:layout_width="fill_parent"
       android:layout height="wrap content"
       android:text="Button3"/>
    <Button
       android:layout width="fill parent"
```

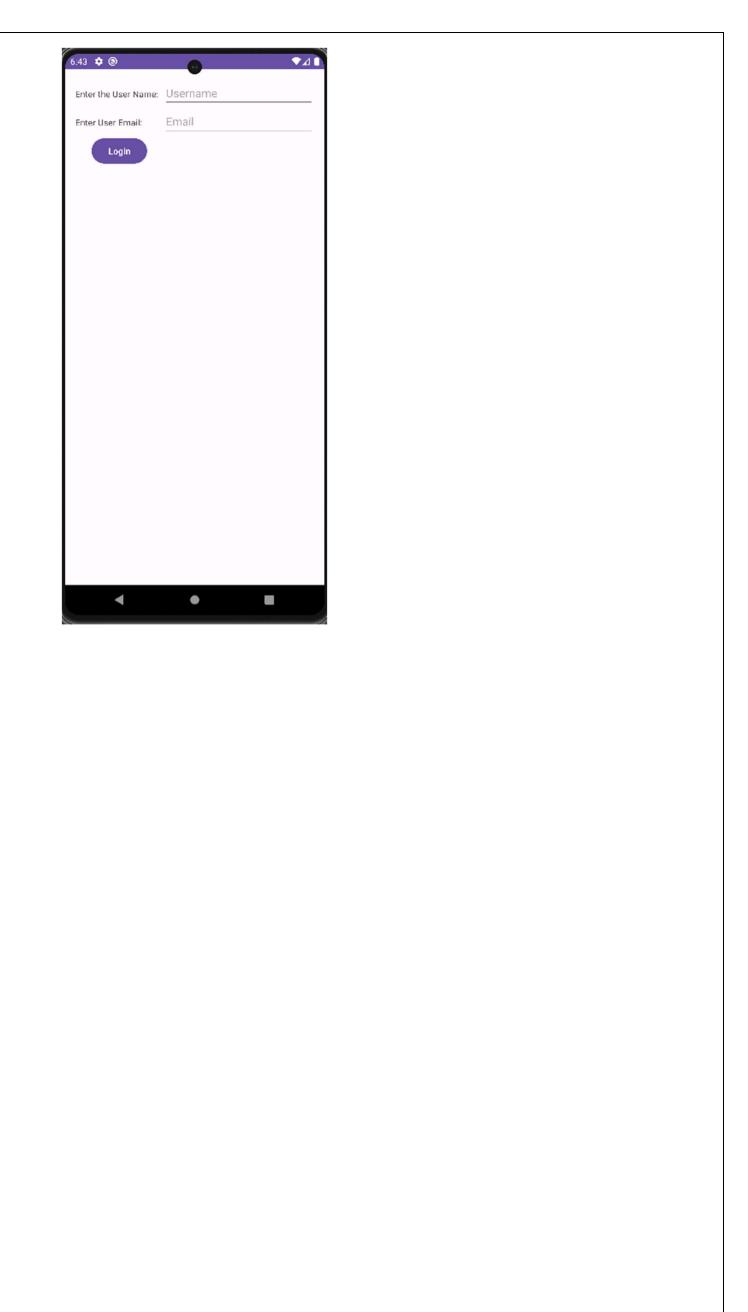
```
android:layout_height="wrap_content"
  android:text="Button4"/>
<Button
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:text="Button5"/>
<Button
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:text="Button6"/>
<Button
  android:layout_width="fill_parent"
  android:layout height="wrap content"
  android:text="Button7"/>
<Button
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:text="Button8"/>
<Button
  android:layout_width="fill_parent"
  android:layout_height="wrap_content"
  android:text="Button9"/>
<Button
  android:layout width="fill parent"
  android:layout height="wrap content"
  android:text="Button10"/>
<Button
```

```
android:layout_width="fill_parent"
       android:layout_height="wrap_content"
      android:text="Button11"/>
    <Button
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button12"/>
    <Button
      android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button13"/>
    <Button
      android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button14"/>
    <Button
       android:layout_width="fill_parent"
       android:layout_height="wrap_content"
       android:text="Button15"/>
  </LinearLayout>
</ScrollView>
```



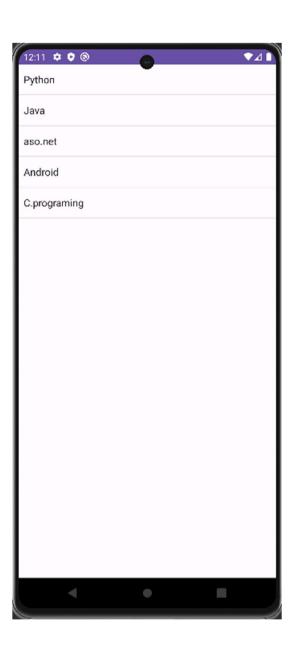
```
16) Create a simple application which creates simple userform by using TableLayout. (User form having
field Enter the user Name &, Enter User Email with login Button)
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout height="match parent"
  android:orientation="vertical"
  android:padding="16dp"
  tools:context=".MainActivity">
  <TableLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:stretchColumns="1">
    <TableRow>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="Enter the User Name:"
         android:paddingEnd="8dp"/>
       <EditText
         android:id="@+id/etUserName"
         android:layout_width="0dp"
         android:layout height="wrap content"
         android:layout weight="1"
```

```
android:hint="Username"/>
    </TableRow>
    <TableRow>
       <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="Enter User Email:"
         android:paddingEnd="8dp"/>
       <EditText
         android:id="@+id/etUserEmail"
         android:layout_width="0dp"
         android:layout_height="wrap_content"
         android:layout_weight="1"
         android:hint="Email"/>
    </TableRow>
    <TableRow>
       <Button
         android:id="@+id/btnLogin"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_gravity="center"
         android:text="Login"/>
    </TableRow>
  </TableLayout>
</LinearLayout>
```



```
17)Create a Simple application which creates and display ListView of Subject names.
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ListView;
import android.widget.ArrayAdapter;
import android.widget.Adapter;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
  public ListView 11;
  String subject[]={"Python","Java","ado.net","Android","C.programing"};
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    11=(ListView)findViewById(R.id.list1);
    ArrayAdapter<String>arr=new ArrayAdapter<String>(this,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item,subject);
    11.setAdapter(arr);
    11.setOnItemClickListener(new AdapterView.OnItemClickListener() {
       @Override
       public void onItemClick(AdapterView<?> parent, View view, int pos, long id) {
         Toast.makeText(parent.getContext(),
              "Item Selected"+parent.getItemAtPosition(pos).toString(),
              Toast.LENGTH LONG).show();
```

}
};
}
}



```
18) Create a simple application which creates Spinner View of Country name.
package com.example.tybca_13214;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Adapter;
import android.widget.Spinner;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
  public Spinner sp;
  String country[] = {"India", "China", "Nepal", "Bangladesh", "SriLanka"};
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    sp=(Spinner) findViewById(R.id.sp1);
    ArrayAdapter<String>arr=new ArrayAdapter<String>(this,
androidx.appcompat.R.layout.support_simple_spinner_dropdown_item,
         country);
    sp.setAdapter(arr);
    sp.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
       @Override
       public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
         Toast.makeText(getApplicationContext(),
              "Selected Item="+adapterView.getItemAtPosition(i).toString(),
              Toast.LENGTH LONG).show();
```

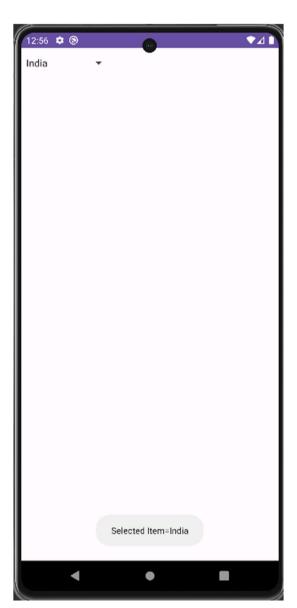
```
@Override

public void onNothingSelected(AdapterView<?> adapterView){

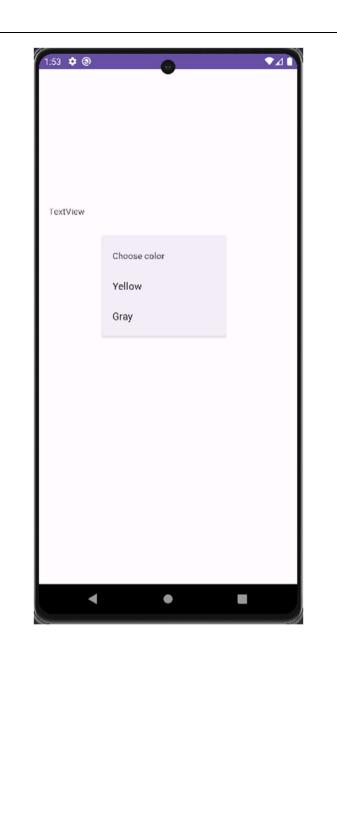
}

});

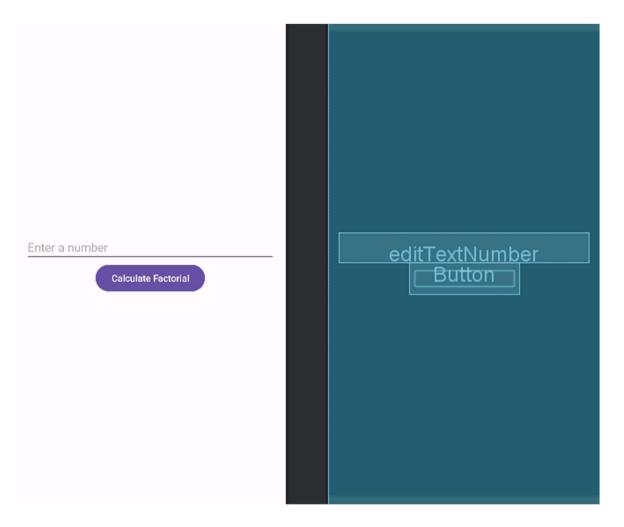
}
```



```
19)Create a Simple application to display context menu of color name (After Long Press)
package com.example.tybca_13214;
import android.os.Bundle;
import android.view.ContextMenu;
import android.view.View;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
  public TextView mytv;
  @Override
  public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    mytv=(TextView)findViewById(R.id.tv1);
    registerForContextMenu(mytv);
  @Override
  public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo
menuInfo){
    super.onCreateContextMenu(menu,v,menuInfo);
    menu.setHeaderTitle("Choose color");
    menu.add(0,v.getId(),0,"Yellow");
    menu.add(0,v.getId(),0,"Gray");
}
```



20)Create a Simple application to accept any number from user and display its factorial value into Toast



```
package com.example.tybca_13214;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
  public EditText editTextNumber;
  public Button calculateButton;
  @Override
  public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    editTextNumber = findViewById(R.id.editTextNumber);
    calculateButton = findViewById(R.id.calculateButton);
    calculateButton.setOnClickListener(new View.OnClickListener() {
```

```
@Override
    public void onClick(View view) {
       calculateFactorial();
  });
public void calculateFactorial() {
  try {
    int number = Integer.parseInt(editTextNumber.getText().toString());
    long factorial = 1;
    for (int i = 1; i \le number; i++) {
       factorial *= i;
    String resultMessage = "Factorial of " + number + " is " + factorial;
    Toast.makeText(this, resultMessage, Toast.LENGTH_SHORT).show();
  } catch (NumberFormatException e) {
    Toast.makeText(this, "Please enter a valid number", Toast.LENGTH_SHORT).show();
  }}}
```

