COURSE OUTCOME - 1

PROGRAM - 1

AIM:

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

PROGRAM CODE:

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  android:paddingLeft="16dp"
  android:paddingRight="16dp">

  <EditText
    android:id="@+id/usr"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="User Name" />

  <EditText
    android:id="@+id/pass"
    android:layout_width="match_parent"
    android:layout_height="59dp"
    android:ems="10"
    android:hint="password"
    android:inputType="textPassword"/>

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

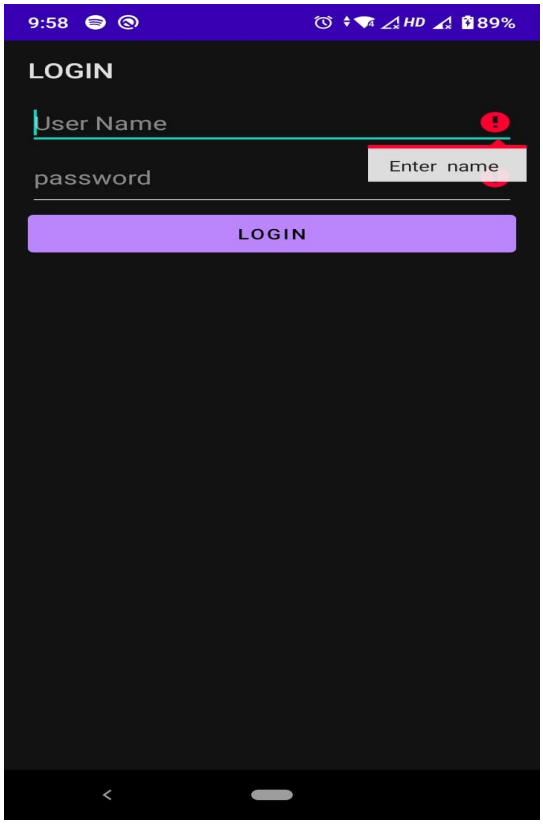
JAVA CODE:

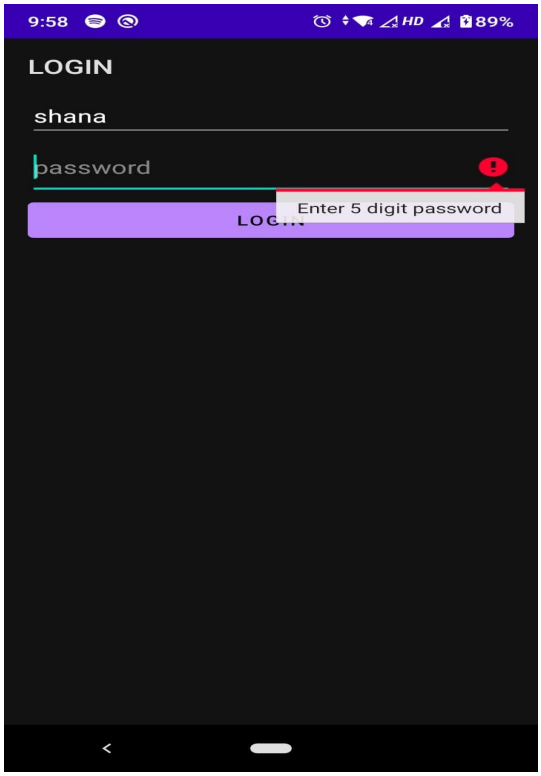
```
package com.example.login;

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

import java.util.Objects;

public class MainActivity extends AppCompatActivity {
  EditText username,password;
  Button btn;

  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    username = (EditText) findViewById(R.id.usr);
    password = (EditText) findViewById(R.id.pass);
    btn = (Button) findViewById(R.id.button);
    btn.setOnClickListener(new View.OnClickListener(){
      @Override
      public void onClick(View v)
      {

        validate();
      }
    });

  }

  public void validate()
  {
    String name=username.getText().toString();
    String pass=password.getText().toString();
```

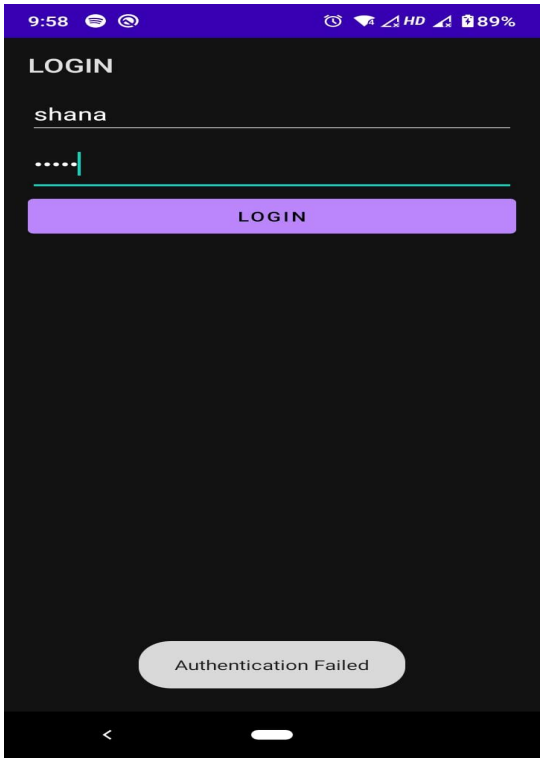
```
String namePattern="[0-9!@#$%^&*]";
int valid=1;

if(name.length()==0)
{
   username.getText().clear();
   username.requestFocus();
   username.setError("Enter  name ");
   Toast.makeText(getApplicationContext(), "Enter valid name",
Toast.LENGTH_SHORT).show();
   valid++;
}
if(name.matches(namePattern))
{
   username.getText().clear();
   username.requestFocus();
   username.setError("Name contains illegal characters");
   Toast.makeText(getApplicationContext(), "Enter valid name",
Toast.LENGTH_SHORT).show();
   valid++;
}

if(password.length()==0)
{
   password.requestFocus();
   password.setError("Enter password");
   valid++;
}
if(password.length()<5)
{
   password.requestFocus();
   password.setError("Enter 5 digit password");
   valid++;

}


if(valid==1)
{
```

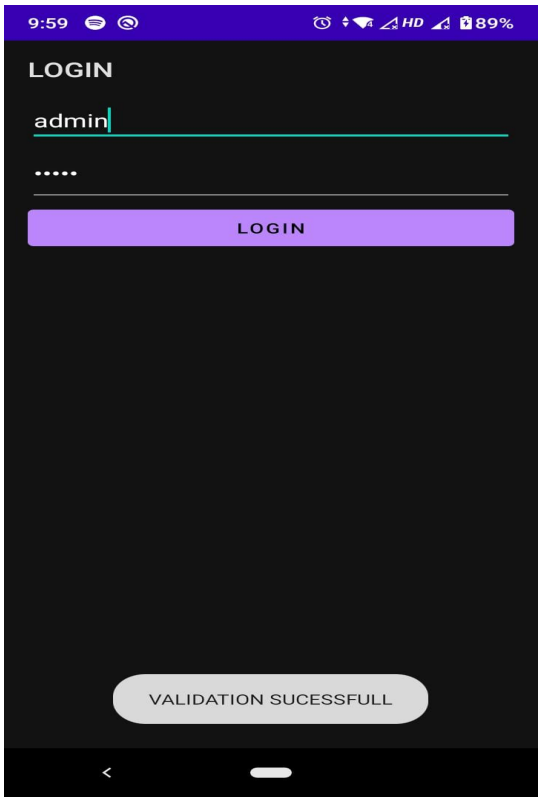
```
        Toast.makeText(getApplicationContext(), "VALIDATION SUCESSFULL",
Toast.LENGTH_SHORT).show();
      }
      if(Objects.equals(username.getText().toString(),
"admin")&&Objects.equals(password.getText().toString(),"admin"))
      {
         Toast.makeText(MainActivity.this,"You have Authenticated
Successfully",Toast.LENGTH_LONG).show();
      }else
      {
         Toast.makeText(MainActivity.this,"Authentication
Failed",Toast.LENGTH_LONG).show();
      }
   }


}
```

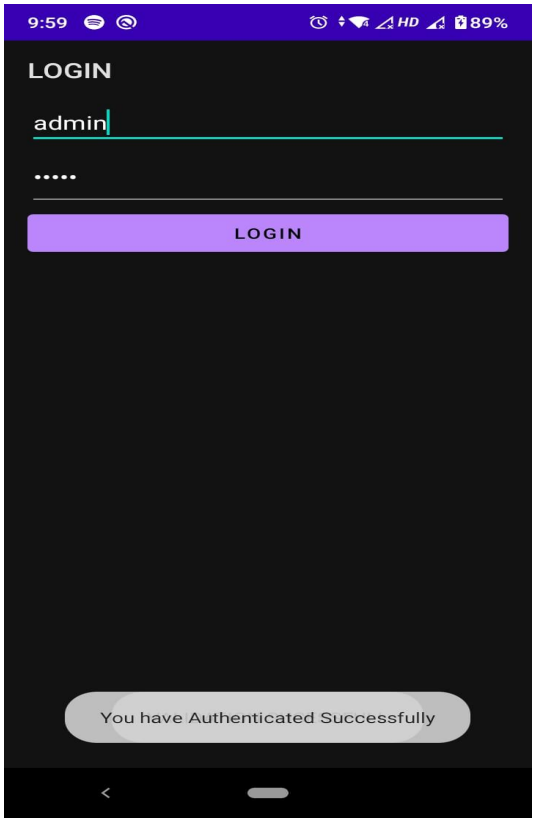
OUTPUT:


9:58
89%
LOGIN
User Name
Enter name
password
LOGIN


9:58
89%
LOGIN
shana
password
Enter 5 digit password


9:58
89%
LOGIN
shana
LOGIN
Authentication Failed


9:59
89%
LOGIN
admin
LOGIN
VALIDATION SUCESSFULL



RESULT:

The program executed successfully and obtained the output.

PROGRAM - 2

AIM:

Write a program that demonstrates Activity Lifecycle.

PROGRAM CODE:

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/name"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="HELLOOOO"
        android:textColor="#9C27B0"
        android:textColorHighlight="#F44336"
        android:textColorLink="#F44336"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
```

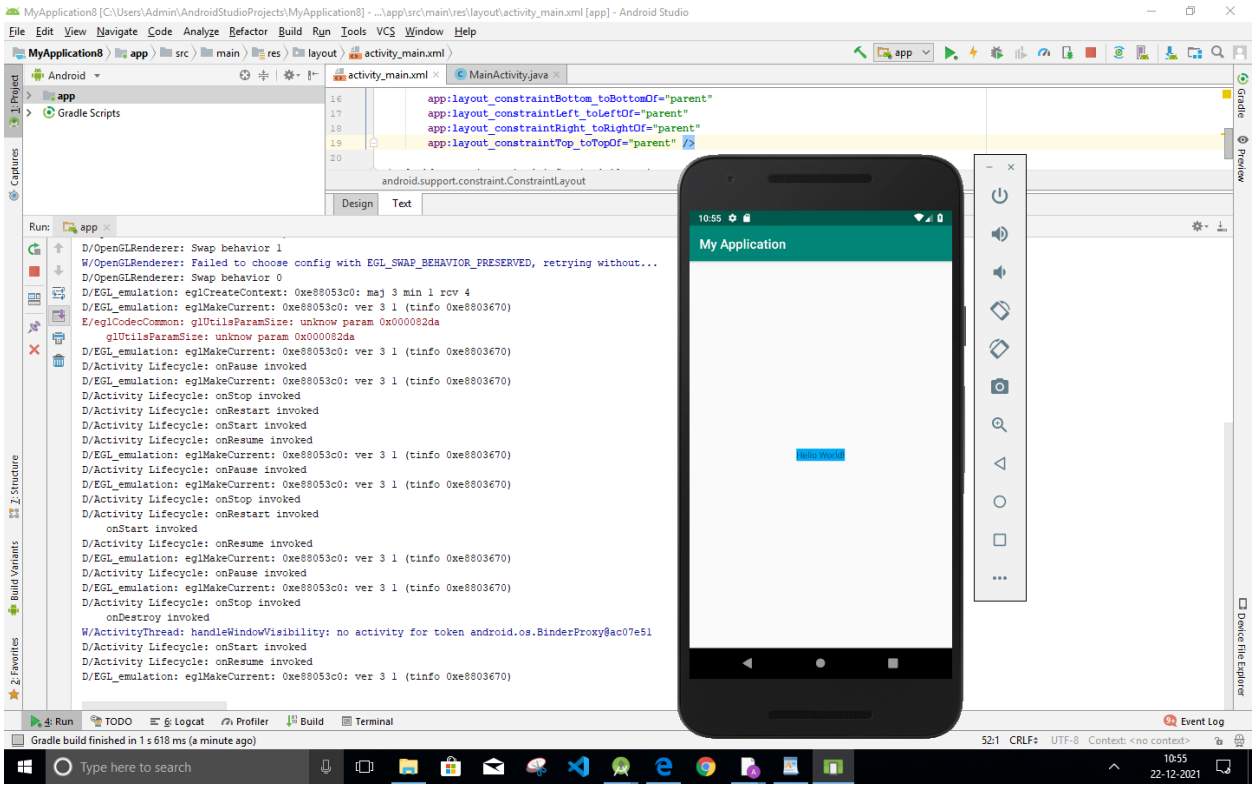
JAVA CODE:

```
package com.example.myactivity;

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

```
import android.os.Bundle;
import android.util.Log;

public class MainActivity extends AppCompatActivity {

    @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");
    }
}
```

OUTPUT:



RESULT:

The program executed successfully and obtained the output.

PROGRAM - 3

AIM:

Implementing basic arithmetic operations of a simple calculator.

PROGRAM CODE:

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/number1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:hint="number1"
        android:textColor="#FF5722"
        android:textColorHint="#3F51B5"
        android:textColorLink="#E91E63"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.502"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.173" />

    <EditText
        android:id="@+id/number2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
```

```
    android:inputType="textPersonName"
    android:hint="number2"
    android:textColor="#FF5722"
    android:textColorHint="#3F51B5"
    android:textColorLink="#E91E63"
    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="0.279" />

<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="TextView"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.47"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.415" />

<Button
    android:id="@+id/add"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="add"
    android:textColor="#3F51B5"
    app:backgroundTint="#8BC34A"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/sub"
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
    android:text="sub"
    android:textColor="#3F51B5"
    app:backgroundTint="#8BC34A"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.492"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.584" />

<Button
    android:id="@+id/mul"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="mul"
    android:textColor="#3F51B5"
    app:backgroundTint="#8BC34A"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.492"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.68" />

<Button
    android:id="@+id/div"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="div"
    android:textColor="#3F51B5"
    app:backgroundTint="#8BC34A"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.482"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.774" />
```

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

JAVA CODE:

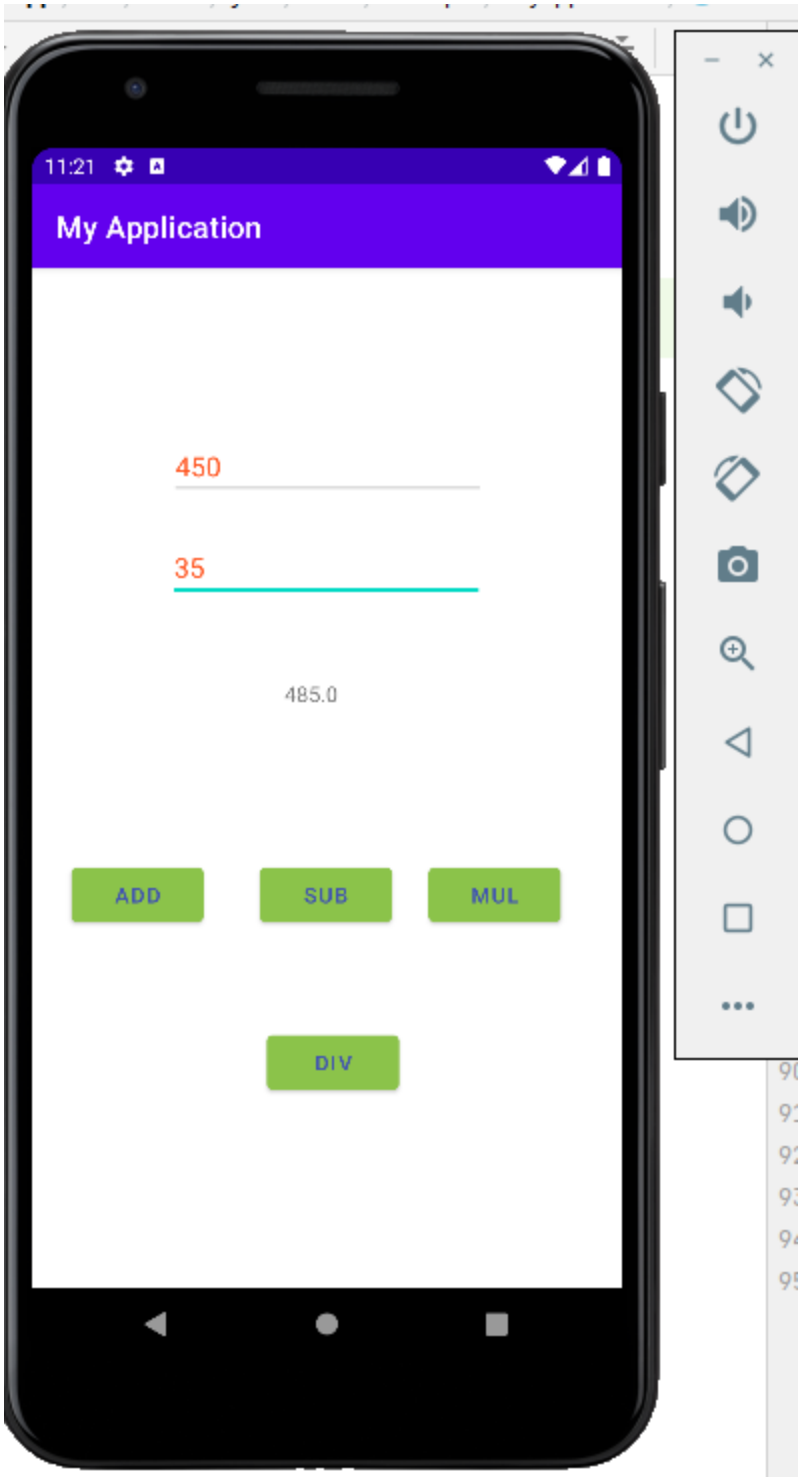
```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {
    private EditText number1;
    private EditText number2;
    private Button add;
    private Button sub;
    private Button mul;
    private Button div;
    private TextView textView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        number1 = (EditText) findViewById(R.id.number1);
        number2 = (EditText) findViewById(R.id.number2);
        add = (Button) findViewById(R.id.add);
        sub = (Button) findViewById(R.id.sub);
        mul = (Button) findViewById(R.id.mul);
        div = (Button) findViewById(R.id.div);
        textView = (TextView) findViewById(R.id.textView);
        // Addition
        add.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
```

```
            if ((number1.getText().length() > 0) && (number2.getText().length() > 0)) {
                double oper1 = Double.parseDouble(number1.getText().toString());
                double oper2 = Double.parseDouble(number2.getText().toString());
                double result = oper1 + oper2;
                textView.setText(Double.toString(result));
            } else {
                Toast toast = Toast.makeText(MainActivity.this, "Enter The Required Numbers",
Toast.LENGTH_LONG);
                toast.show();
            }
        }
    });
    //Subtraction
    sub.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            if ((number1.getText().length() > 0) && (number2.getText().length() > 0)) {
                double oper1 = Double.parseDouble(number1.getText().toString());
                double oper2 = Double.parseDouble(number2.getText().toString());
                double result = oper1 - oper2;
                textView.setText(Double.toString(result));
            } else {
                Toast toast = Toast.makeText(MainActivity.this, "Enter The Required Numbers",
Toast.LENGTH_LONG);
                toast.show();
            }

        }
    });
    // Multiplication
    mul.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            if ((number1.getText().length() > 0) && (number2.getText().length() > 0)) {
                double oper1 = Double.parseDouble(number1.getText().toString());
                double oper2 = Double.parseDouble(number2.getText().toString());
                double result = oper1 * oper2;
                textView.setText(Double.toString(result));
            } else {
```

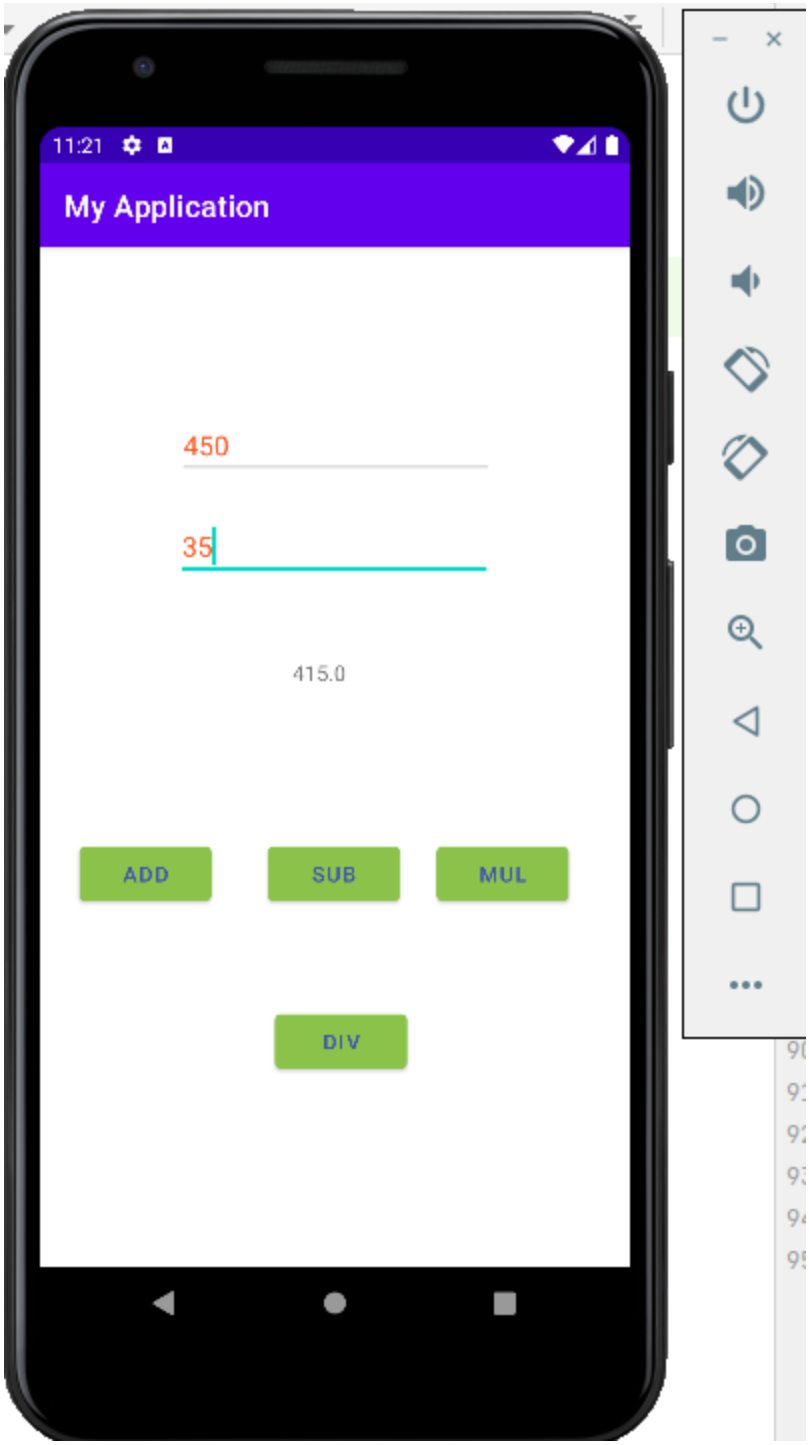
```
                Toast toast = Toast.makeText(MainActivity.this, "Enter The Required Numbers",
Toast.LENGTH_LONG);
                toast.show();
            }
        }
    });
    // Division
    div.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            if ((number1.getText().length() > 0) && (number2.getText().length() > 0)) {
                double oper1 = Double.parseDouble(number1.getText().toString());
                double oper2 = Double.parseDouble(number2.getText().toString());
                double result = oper1 / oper2;
                textView.setText(Double.toString(result));
            } else {
                Toast toast = Toast.makeText(MainActivity.this, "Enter The Required Numbers",
Toast.LENGTH_LONG);
                toast.show();
            }
        }
    });
  }
}
```

OUTPUT:

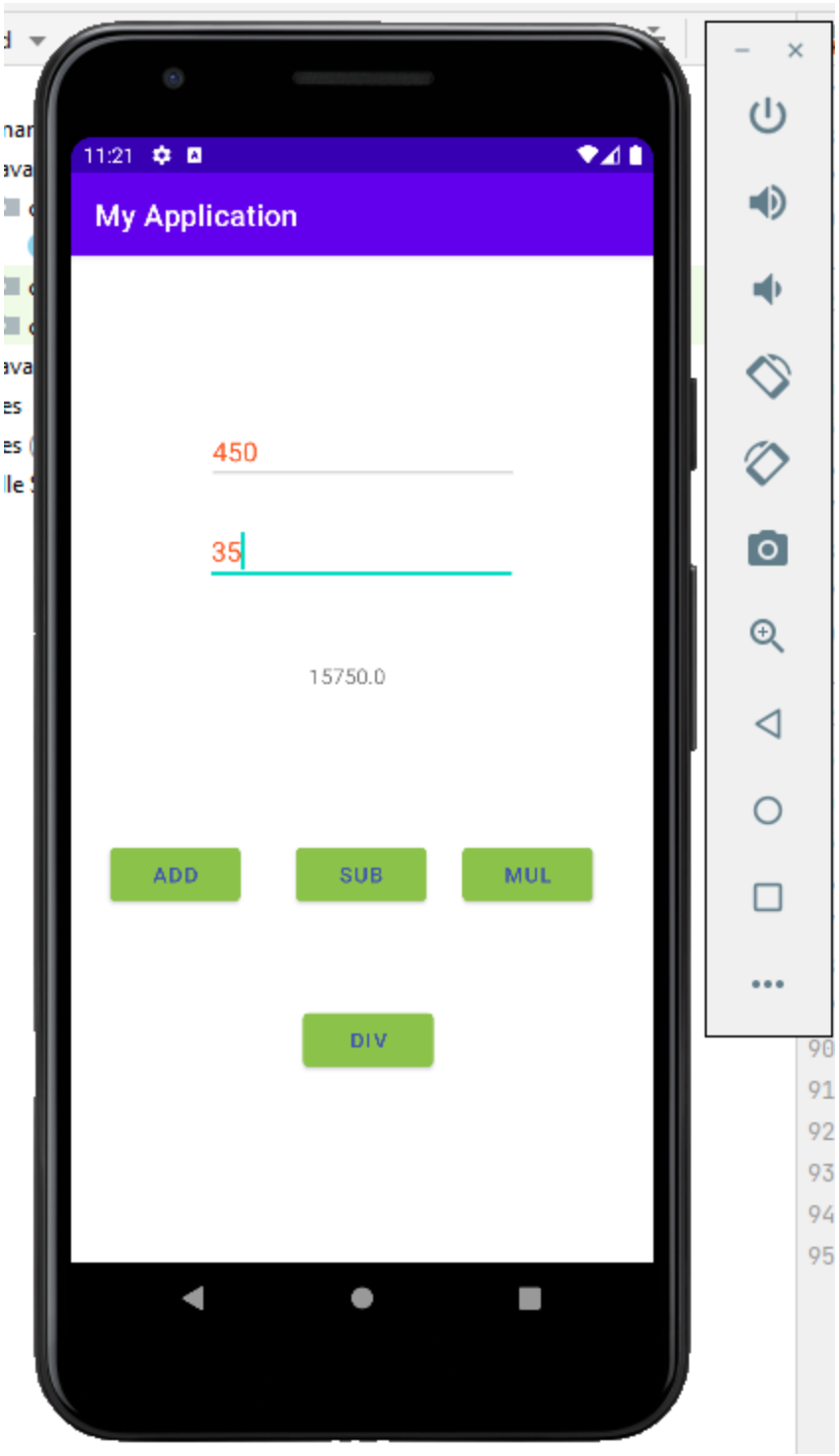
1. **ADD**



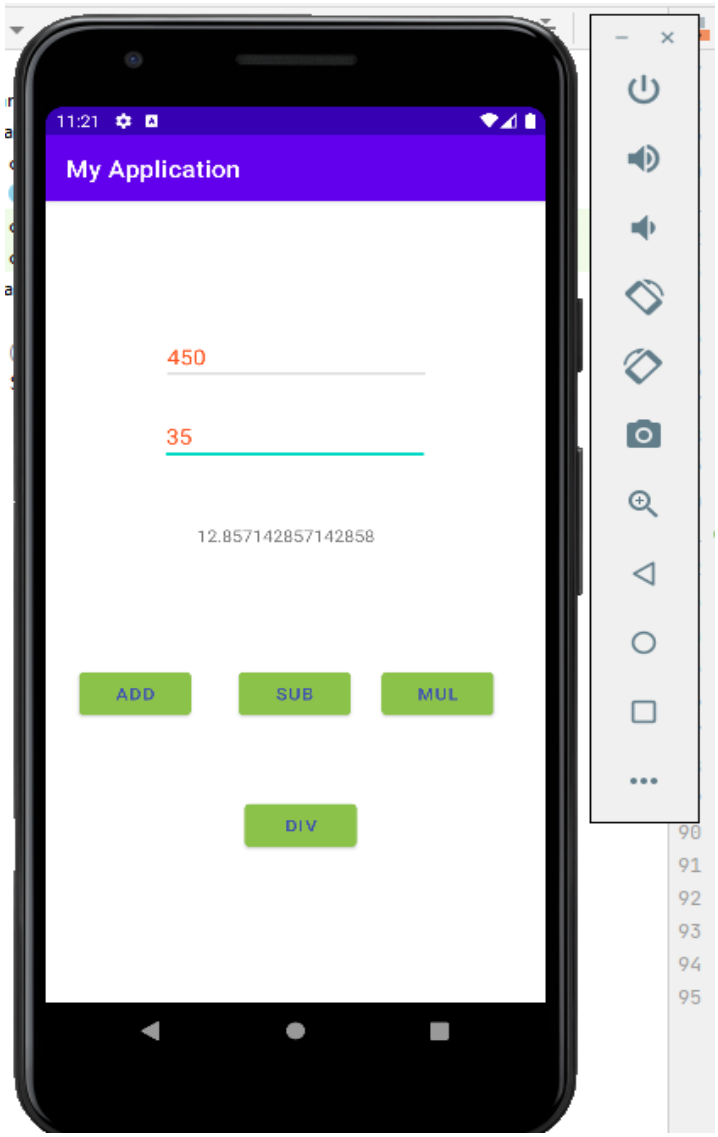
2. **SUBTRACT:**



3. **MULTIPLY:**



4. **DIVIDE:**



RESULT:

The program executed successfully and obtained the output.

PROGRAM - 4

AIM:

Implement validations on various UI controls

PROGRAM CODE:

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="PASSWORD"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.145"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.519" />

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="NAME"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.167"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.14" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="MOB NO"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.167"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.327" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="EMAIL"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.194"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.431" />

<EditText
    android:id="@+id/editText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:hint="Name"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.125" />

<EditText
    android:id="@+id/editText2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Number"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.319" />

<EditText
    android:id="@+id/editText3"
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textEmailAddress"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.425" />

<EditText
    android:id="@+id/editText4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPassword"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.523" />

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:background="#00BCD4"
    android:text="OK"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.464"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.67" />

<EditText
    android:id="@+id/addr"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:hint="Address"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
```

```
        app:layout_constraintVertical_bias="0.221" />

    <TextView
        android:id="@+id/adr"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Address"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.17"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.233" />


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

JAVA CODE:

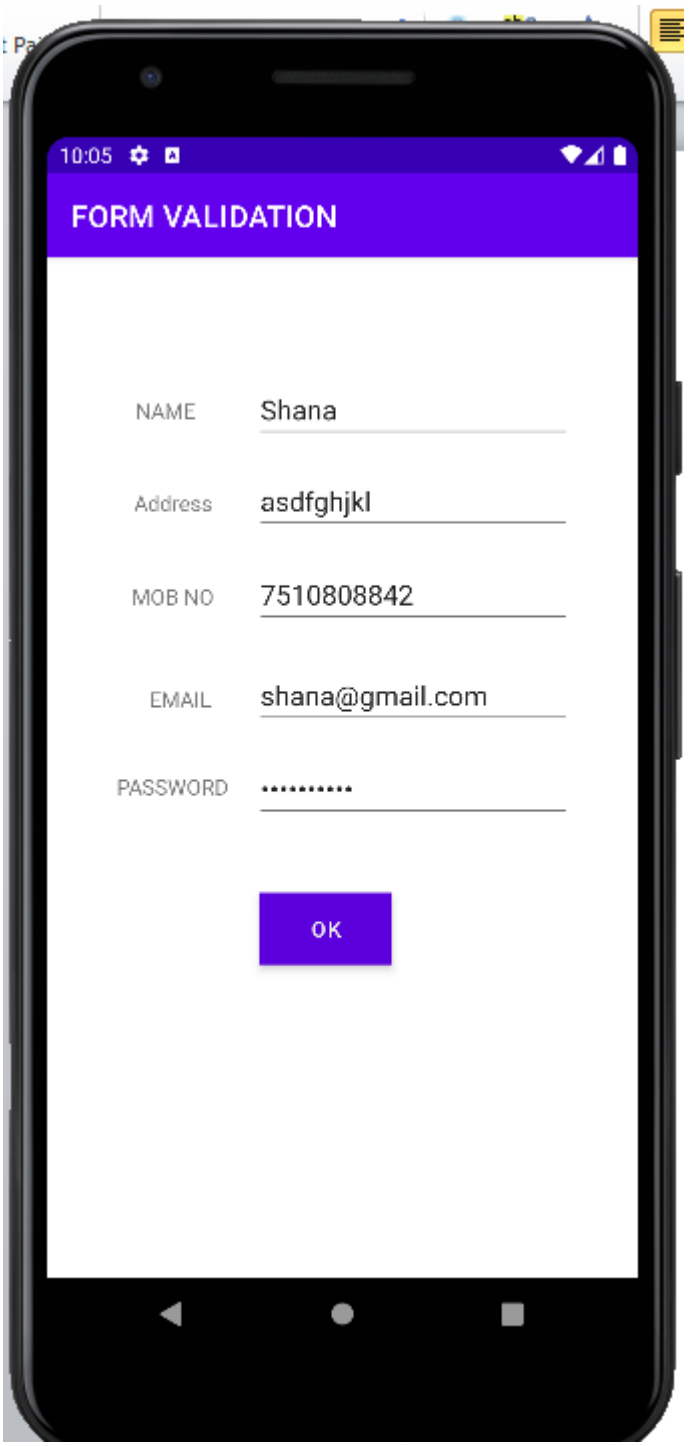
```
package com.example.formvalidation;
import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {
    Button button;
    TextView name,number,password,mail,addr;
    EditText ename,enumber,epassword,email,address;

    @Override

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

        button = findViewById(R.id.button);

        name = findViewById(R.id.textView1);
        number = findViewById(R.id.textView2);
        mail = findViewById(R.id.textView3);
        password = findViewById(R.id.textView4);
        addr=findViewById(R.id.adr);
```

```
    ename= findViewById(R.id.editText);
    enumber= findViewById(R.id.editText2);
    email= findViewById(R.id.editText3);
    epassword= findViewById(R.id.editText4);
    address= findViewById(R.id.addr);



    button.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            login();
        }
    });

}
public void login() {
    if (ename.getText().toString().length() == 0) {
        ename.requestFocus();
        ename.setError("Name is required");
        return;
    }
    String namePattern="^[0-9!@#$%^&*]+$";
    if(ename.getText().toString().matches(namePattern))
    {   ename.requestFocus();
        ename.setError("Enter valid name");
        return;

    }
    String fPattern="^[A-Za-z!@#$%^&*]+[0-9!@#$%^&*]+[A-Za-z!@#$%^&*]+$";
    if(ename.getText().toString().matches(fPattern))
    {   ename.requestFocus();
        ename.setError("Enter valid name");
        return;

    }
    String namPattern="^[A-Za-z!@#$%^&*]+[0-9!@#$%^&*]+$";
    if(ename.getText().toString().matches(namPattern))
    {   ename.requestFocus();
        ename.setError("Enter valid name");
        return;

    }
    String naPattern="^[0-9!@#$%^&*]+[A-Za-z!@#$%^&*]++$";
    if(ename.getText().toString().matches(naPattern))
    {   ename.requestFocus();
        ename.setError("Enter valid name");
        return;
```

```
}
if (address.getText().toString().length() == 0) {
    address.requestFocus();
    address.setError("Address is required");
    return;
}
String noPattern="^[A-Za-z!@#$%^&*]+$";
if(enumber.getText().toString().matches(noPattern))
{   enumber.requestFocus();
    enumber.setError("Enter valid number");
    return;

}
String numPattern="^[A-Za-z]+[0-9]+[!@#$%^&*]+$";
if(enumber.getText().toString().matches(numPattern))
{   enumber.requestFocus();
    enumber.setError("Enter valid number");
    return;

}
String nuPattern="^[A-Za-z]+[0-9]+$";
if(enumber.getText().toString().matches(nuPattern))
{   enumber.requestFocus();
    enumber.setError("Enter valid number");
    return;

}
String nPattern="^[0-9]+[A-Za-z]+$";
if(enumber.getText().toString().matches(nPattern))
{   enumber.requestFocus();
    enumber.setError("Enter valid number");
    return;

}
String numberPattern="^[0-9]+[!@#$%^&*]+$";
if(enumber.getText().toString().matches(numberPattern))
{   enumber.requestFocus();
    enumber.setError("Enter valid number");
    return;

}
if (enumber.getText().toString().length() == 0) {
    enumber.requestFocus();
    enumber.setError("Number is required");
    return;
}
if (enumber.getText().toString().length() < 10) {
```

```
            enumber.requestFocus();
            enumber.setError("Enter 10 digit number");
            return;
        }
        if (enumber.getText().toString().length() >10) {
            enumber.requestFocus();
            enumber.setError("Enter 10 digit number");
            return;
        }


        if (email.getText().toString().length() == 0) {
            Toast.makeText(getApplicationContext(), "Invalid Email Address",
Toast.LENGTH_SHORT).show();
            email.requestFocus();
            email.setError("email is required");
            return;
        }
        String emailpattern="^[a-zA-Z0-9._-]+@[a-z]+.+[a-z]+$";
        if(email.getText().toString().matches(emailpattern)) {

        }
        else{
            email.requestFocus();
            email.setError("Enter valid email");
            return;
        }
        if (epassword.getText().toString().length() == 0)
        {
            epassword.requestFocus();
            epassword.setError("Enter valid password");
            return;
        }

        if (epassword.getText().toString().length() < 8) {
            epassword.requestFocus();
            epassword.setError("Enter minimum 8 digit password");
            return;
        }

    }
}
```

OUTPUT:



RESULT:

The program executed successfully and obtained the output.