Program no:5

Aim Implement validations on various UI controls

```
XML Code:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_width="match_parent"
  android:layout_height="match_parent" android:orientation="vertical"
  tools:context=".MainActivity"
  tools:ignore="HardcodedText">
  <EditText
  android:id="@+id/firstName"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
 android:layout_marginTop="16dp"
 android:layout_marginEnd="16dp"
 android:hint="First Name"
 android:inputType="text"/>
    <EditText
    android:id="@+id/lastName"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="16dp"
```

android:layout_marginEnd="16dp"

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

```
android:orientation="horizontal">
     <Button
        android:id="@+id/cancelButton"
        style="@style/Widget.AppCompat.Button.Borderless"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="4dp" android:text="CANCEL"
        android:textColor="@color/white"/>
     <Button
        android:id="@+id/proceedButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="16dp"
        android:backgroundTint="@color/black"
        android:text="PROCEED"
        android:textColor="@android:color/white"
        tools:ignore="ButtonStyle"/>
        </LinearLayout>
        </LinearLayout>
 Java Code:
package com.example.validation;
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 {
  Button bCancel, bProceed;
  EditText etFirstName, etLastName, etEmail, etPassword; boolean
  isAllFieldsChecked = false;
  @Override
    protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_main);
     bProceed = findViewById(R.id.proceedButton);
     bCancel = findViewById(R.id.cancelButton);
     etFirstName = findViewById(R.id.firstName);
     etLastName = findViewById(R.id.lastName); etEmail =
     findViewById(R.id.email); etPassword =
     findViewById(R.id.password);
     bProceed.setOnClickListener(new
     View.OnClickListener() {
     @Override
        public void onClick(View v) {
           isAllFieldsChecked = CheckAllFields(); if
           (isAllFieldsChecked) {
             Intent i = new Intent(MainActivity.this, MainActivity2.class);
             startActivity(i);
           }
        }
```

```
});
  bCancel.setOnClickListener(new View.OnClickListener() {
      @Override
     public void onClick(View v){
  MainActivity.this.finish();
  System.exit(0);
  }
  });
}
private boolean CheckAllFields() { if
  (etFirstName.length() == 0) {
     etFirstName.setError("This field is required"); return
     false;
  }
  if (etLastName.length() == 0) {
     etLastName.setError("This field is required"); return
     false;
  }
  if (etEmail.length() == 0) {
     etEmail.setError("Email is required");
     return false;
  }
  if (etPassword.length() == 0) {
     etPassword.setError("Password is required"); return
```

```
false;
} else if (etPassword.length() < 8) {
    etPassword.setError("Password must be minimum 8 characters"); return
    false;
}
return true;
}
</pre>
```

Output:

