MainActivity.java

```
package com.example.electricity;
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,t2;
Button b;
String name, password;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main);
    e1=(EditText)findViewById(R.id.Name);
    e2=(EditText)findViewById(R.id.Password);
    t1=(TextView)findViewById(R.id.name);
    t2=(TextView)findViewById(R.id.password);
    b=(Button)findViewById(R.id.button);
    b.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
       name=e1.getText().toString();
       password=e2.getText().toString();
           String namepattern="[!@#$%^&*(),;:']";
           if(name.equals(namepattern)){
              e1.setError("Invalid Name");
           if(password.length()<6){</pre>
              e2.setError("Passoword must contain 6 digits");
           }
       intent i = new intent(getApplicationContext(),MainActivity2.class);
         startActivity(i);
       }
    });
```

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=".MainActivity">
  <EditText
    android:id="@+id/Name"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.835"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.205" />
  <TextView
    android:id="@+id/name"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:text="NAME"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout constraintEnd toEndOf="@+id/Name"
    app:layout_constraintHorizontal_bias="0.115"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="0.212" />
  <TextView
    android:id="@+id/password"
    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="0.108"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.332" />
  <Button
    android:id="@+id/button"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
```

```
android:text="LOGIN"
    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="0.499" />
  <EditText
    android:id="@+id/Password"
    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="0.84"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="0.325" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity2.java

```
package com.example.electricity;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.text.Editable;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity2 extends AppCompatActivity {
  EditText e1,e2,e3;
  TextView t1,t2,t3,t4;
  Button b;
  Integer unit;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main3);
    e1=(EditText)findViewById(R.id.cName);
    e2=(EditText)findViewById(R.id.cID);
    e3=(EditText)findViewById(R.id.cUnit);
    t1=(TextView)findViewById(R.id.cname);
    t2=(TextView)findViewById(R.id.cid);
```

```
t3=(TextView)findViewById(R.id.amount);
b=(Button)findViewById(R.id.button2);
}
```

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=".MainActivity2">
  <TextView
    android:id="@+id/cname"
    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="0.138"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="0.169" />
  <TextView
    android:id="@+id/cid"
    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="0.138"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.287" />
  <TextView
    android:id="@+id/cunit"
    android:layout_width="56dp"
    android:layout_height="22dp"
    android:text="TextView"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.143"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.407" />
```

```
<EditText
  android:id="@+id/cName"
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:ems="10"
  android:inputType="textPersonName"
  app:layout constraintBottom toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.86"
  app:layout_constraintStart_toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout constraintVertical bias="0.158"/>
<EditText
  android:id="@+id/cID"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:ems="10"
  android:inputType="textPersonName"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.865"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout_constraintVertical_bias="0.275" />
<EditText
  android:id="@+id/cUnit"
  android:layout width="wrap content"
  android:layout_height="wrap_content"
  android:ems="10"
  android:inputType="textPersonName|numberDecimal"
  app:layout constraintBottom toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout constraintHorizontal bias="0.865"
  app:layout_constraintStart_toStartOf="parent"
  app:layout constraintTop toTopOf="parent"
  app:layout_constraintVertical_bias="0.4" />
<Button
  android:id="@+id/button2"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="CLICK"
  app:layout constraintBottom toBottomOf="parent"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintStart toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  app:layout constraintVertical bias="0.572"/>
<TextView
  android:id="@+id/amount"
  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="0.498" app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" app:layout_constraintVertical_bias="0.716" /> </androidx.constraintlayout.widget.ConstraintLayout>
```

OUTPUT

