

## Experiment – 1

**Aim:** Design an application to perform the arithmetic operations by reading the input from user

**Solution:**

**activity\_main.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/aBox"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:minHeight="48dp"
        android:minWidth="48dp"
        android:hint="Enter a Value"
        android:inputType="text"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toTopOf="@+id/bBox"/>

    <EditText
        android:id="@+id/bBox"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Enter b Value"
        android:inputType="text"
        android:minWidth="48dp"
        android:minHeight="48dp"
        app:layout_constraintBottom_toTopOf="@+id/addBtn"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/aBox" />

    <Button
        android:id="@+id/addBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/subBtn"
        app:layout_constraintBottom_toTopOf="@+id/mulBtn"
```

```
app:layout_constraintTop_toBottomOf="@+id/bBox"/>
```

```
<Button
    android:id="@+id/subBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="-"
    tools:layout_editor_absoluteX="230dp"
    tools:layout_editor_absoluteY="322dp"
    app:layout_constraintBottom_toTopOf="@+id/divBtn"
    app:layout_constraintStart_toEndOf="@+id/addBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/bBox"/>
```

```
<Button
    android:id="@+id/mulBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="*"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/addBtn"
    app:layout_constraintEnd_toStartOf="@+id/divBtn"
    app:layout_constraintBottom_toTopOf="@+id/result"/>
```

```
<Button
    android:id="@+id/divBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="/"
    tools:layout_editor_absoluteX="230dp"
    tools:layout_editor_absoluteY="322dp"
    app:layout_constraintBottom_toTopOf="@+id/result"
    app:layout_constraintStart_toEndOf="@+id/mulBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/subBtn" />
```

```
<TextView
    android:id="@+id/result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/divBtn" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

### **MainActivity.java:**

```
package com.example.arith;

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;

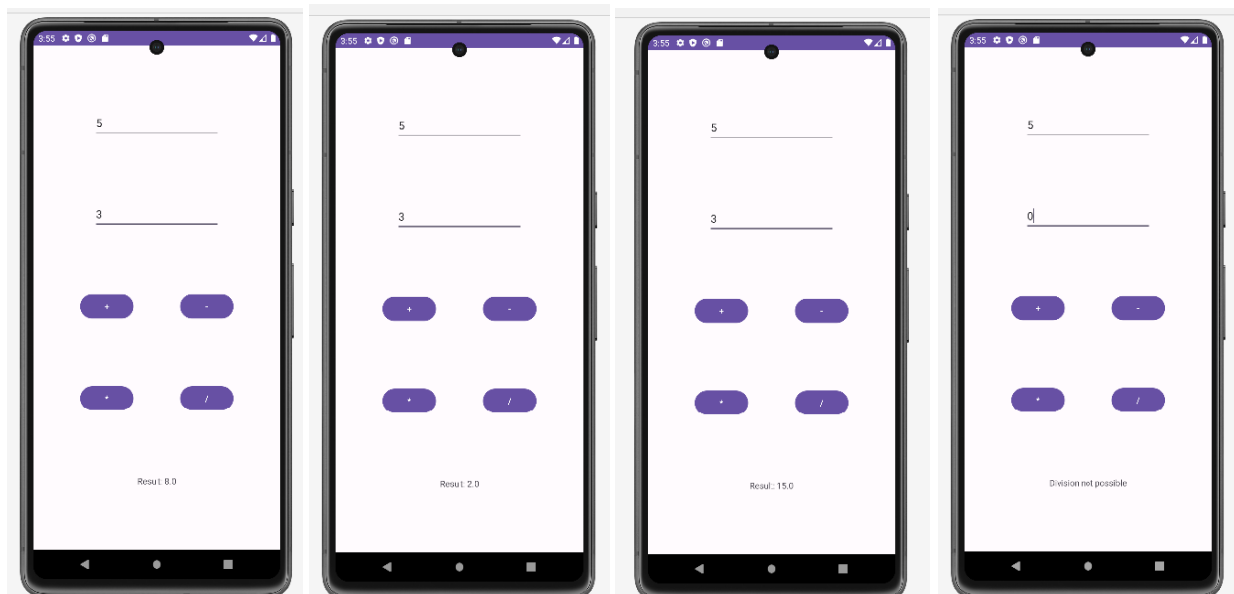
public class MainActivity extends AppCompatActivity {
    EditText aval, bval;
    Button add, sub, mul, div;
    TextView res;
    Double a, b;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        aval = findViewById(R.id.aBox);
        bval = findViewById(R.id.bBox);
        add = findViewById(R.id.addBtn);
        sub = findViewById(R.id.subBtn);
        mul = findViewById(R.id.mulBtn);
        div = findViewById(R.id.divBtn);
        res = findViewById(R.id.result);
        add.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                a = Double.parseDouble(aval.getText().toString());
                b = Double.parseDouble(bval.getText().toString());
                res.setText("Result: "+(a+b));
            }
        });
        sub.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                a = Double.parseDouble(aval.getText().toString());
                b = Double.parseDouble(bval.getText().toString());
                res.setText("Result: "+(a-b));
            }
        });
        mul.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                a = Double.parseDouble(aval.getText().toString());
                b = Double.parseDouble(bval.getText().toString());
                res.setText("Result: "+(a*b));
            }
        });
    }
}
```

```

    }
    });
    div.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            a = Double.parseDouble(aval.getText().toString());
            b = Double.parseDouble(bval.getText().toString());
            if(b!=0)
                res.setText("Result: "+(a/b));
            else
                res.setText("Division not possible");
        }
    });
}
}

```

### Output:



## Experiment - 2

**Aim:** Design an application to calculate the body mass index by reading the input from user

**Solution:**

**activity\_main.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">

<TextView
    android:id="@+id/header"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="BMI Calculator"
    android:textSize="48dp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintBottom_toTopOf="@+id/wtLbl" />

<TextView
    android:id="@+id/wtLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Weight (in Kg)"
    android:textStyle="bold"
    tools:layout_editor_absoluteX="53dp"
    tools:layout_editor_absoluteY="178dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/wtBox"
    app:layout_constraintBottom_toTopOf="@+id/htLbl"
    app:layout_constraintTop_toBottomOf="@+id/header" />

<EditText
    android:id="@+id/wtBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Weight"
    android:inputType="text"
    android:minHeight="48dp"
    tools:layout_editor_absoluteX="184dp"
    tools:layout_editor_absoluteY="164dp"
```

```
app:layout_constraintBottom_toTopOf="@+id/htBox"
app:layout_constraintStart_toEndOf="@+id/wtLbl"
app:layout_constraintTop_toBottomOf="@+id/header"
app:layout_constraintEnd_toEndOf="parent"/>
```

```
<TextView
    android:id="@+id/htLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Height (in Cm)"
    android:textStyle="bold"
    tools:layout_editor_absoluteX="56dp"
    tools:layout_editor_absoluteY="295dp"
    app:layout_constraintTop_toBottomOf="@+id/wtLbl"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/wtBox"
    app:layout_constraintBottom_toTopOf="@+id/calcBtn"/>
```

```
<EditText
    android:id="@+id/htBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:minHeight="48dp"
    android:hint="Enter Height"
    android:inputType="text"
    tools:layout_editor_absoluteX="184dp"
    tools:layout_editor_absoluteY="275dp"
    app:layout_constraintBottom_toTopOf="@+id/calcBtn"
    app:layout_constraintStart_toEndOf="@+id/htLbl"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/wtBox"/>
```

```
<Button
    android:id="@+id/calcBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Calculate"
    tools:layout_editor_absoluteX="157dp"
    tools:layout_editor_absoluteY="431dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/htBox"
    app:layout_constraintBottom_toTopOf="@+id/result"/>
```

```
<TextView
    android:id="@+id/result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:gravity="center_horizontal"
```

```

        android:textStyle="bold"
        tools:layout_editor_absoluteX="180dp"
        tools:layout_editor_absoluteY="571dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/calcBtn"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

### **MainActivity.java:**

```
package com.example.bmicalc;
```

```
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;
```

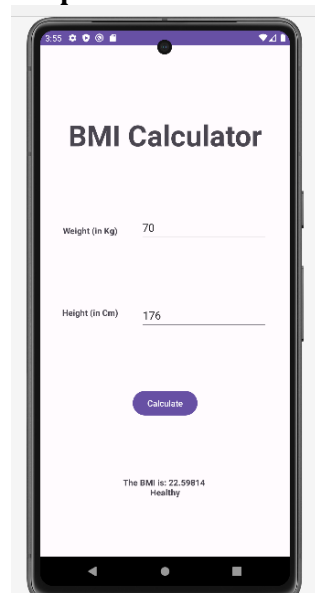
```
public class MainActivity extends AppCompatActivity {
    EditText wtval, htval;
    Button btn;
    TextView res;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    wtval = findViewById(R.id.wtBox);
    htval = findViewById(R.id.htBox);
    btn = findViewById(R.id.calcBtn);
    res = findViewById(R.id.result);
    btn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Float wt = Float.parseFloat(wtval.getText().toString());
            Float ht_m = Float.parseFloat(htval.getText().toString())/100;
            Float bmi = wt/ (ht_m*ht_m);
            if(bmi < 18.5)
                res.setText("The BMI is: "+bmi+" \n Under Weight ");
            else if (bmi >= 18.5 && bmi < 24.9)
                res.setText("The BMI is: "+bmi+" \n Healthy ");
            else if (bmi >= 24.9 && bmi < 30)
                res.setText("The BMI is: "+bmi+" \n Over Weight ");
            else if (bmi>=30)
                res.setText("The BMI is: "+bmi+" \n Suffering from obesity ");
        }
    });
}
```

```
}  
}
```

**Output:**





### Experiment - 3

**Aim: Design an application to fill the registration form using AutoCompleteTextView and RadioButton by reading the input from user**

**Solution:**

**activity\_main.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">

    <TextView
        android:id="@+id/header"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Registration Form"
        android:textSize="34sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toTopOf="@+id/nameLbl"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.605"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/nameLbl"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Name"
        android:textStyle="bold"
        app:layout_constraintBottom_toTopOf="@+id/FNameLbl"
        app:layout_constraintEnd_toStartOf="@+id/NameBox"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/header" />

    <AutoCompleteTextView
        android:id="@+id/PlaceBox"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:hint="Enter Location"
        android:minHeight="48dp"
        app:layout_constraintBottom_toTopOf="@+id/SubmitBtn"
        app:layout_constraintStart_toEndOf="@+id/PlaceLbl"
        app:layout_constraintTop_toBottomOf="@+id/GenderGroup"
        app:layout_constraintEnd_toEndOf="parent" />
```

```
<TextView
    android:id="@+id/PlaceLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Place of Birth"
    android:textStyle="bold"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/GenderGroup"
    app:layout_constraintEnd_toStartOf="@+id/PlaceBox"
    app:layout_constraintBottom_toTopOf="@+id/SubmitBtn"/>
```

```
<TextView
    android:id="@+id/GenderLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Gender"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/PlaceLbl"
    app:layout_constraintEnd_toStartOf="@+id/GenderGroup"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/FNameLbl" />
```

```
<TextView
    android:id="@+id/FNameLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Father Name"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/GenderLbl"
    app:layout_constraintEnd_toStartOf="@+id/FNameBox"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/nameLbl" />
```

```
<RadioGroup
    android:id="@+id/GenderGroup"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintStart_toEndOf="@+id/GenderLbl"
    app:layout_constraintBottom_toTopOf="@+id/PlaceBox"
    app:layout_constraintTop_toBottomOf="@+id/FNameBox"
    app:layout_constraintEnd_toEndOf="parent">
```

```
<RadioButton
    android:id="@+id/MaleBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Male" />
```

```
<RadioButton
```

```

        android:id="@+id/FemaleBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Female" />

</RadioGroup>

<EditText
    android:id="@+id/NameBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Name"
    android:inputType="text"
    android:minHeight="48dp"
    app:layout_constraintBottom_toTopOf="@+id/FNameBox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/nameLbl"
    app:layout_constraintTop_toBottomOf="@+id/header" />

<EditText
    android:id="@+id/FNameBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Father Name"
    android:inputType="text"
    android:minHeight="48dp"
    app:layout_constraintBottom_toTopOf="@+id/GenderGroup"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/FNameLbl"
    app:layout_constraintTop_toBottomOf="@+id/NameBox" />

<Button
    android:id="@+id/SubmitBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Submit"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/PlaceBox"
    app:layout_constraintBottom_toBottomOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

### **MainActivity.java:**

```
package com.example.registrationformacrg;
```

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

```

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AutoCompleteTextView;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    EditText name,fname;
    AutoCompleteTextView places;
    RadioGroup rg;
    RadioButton rb;
    Button btn;
    String[] Locations = {"Bangalore","Delhi","Pune","Bombay","Chennai","Hyderabad","Calcutta"};
    @SuppressWarnings("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        name = findViewById(R.id.NameBox);
        fname = findViewById(R.id.FNameBox);
        places = findViewById(R.id.PlaceBox);
        btn = findViewById(R.id.SubmitBtn);
        ArrayAdapter adapter = new ArrayAdapter(this, android.R.layout.select_dialog_item,Locations);
        places.setThreshold(1);
        places.setAdapter(adapter);
        rg = findViewById(R.id.GenderGroup);
        rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb = findViewById(checkedId);
            }
        });
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String res1 = "Name: "+name.getText().toString()+"\nFather Name: "+fname.getText().toString()+"\nGender: "+rb.getText()+"\nPlace of Birth: "+places.getText().toString();
                Toast.makeText(MainActivity.this,res1,Toast.LENGTH_SHORT).show();
            }
        });
    }
}

```

## Output:

The image displays two side-by-side smartphone screens showing a registration form. The left screen shows the form with input fields for Name, Father Name, Gender, and Place of Birth, and a Submit button. The right screen shows the same form with the same data entered, but with a confirmation message at the bottom.

**Registration Form**

Name: Sindhu

Father Name: Vijay

Gender: ☐ Male ☒ Female

Place of Birth: Chennai

**Submit**

**Registration Form**

Name: Sindhu

Father Name: Vijay

Gender: ☐ Male ☒ Female

Place of Birth: Chennai

Name: Sindhu  
Father Name: Vijay  
Gender: Female  
Place of Birth: Chennai

## Experiment – 4

**Aim:** Design an application to fill the course selection of discipline electives for upcoming semester using Spinner by reading the input from user

**Solution:**

**activity\_main.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">

    <TextView
        android:id="@+id/header"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Electives Selection"
        android:textSize="34sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toTopOf="@+id/nameBox"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/nameLbl"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Student Name"
        android:textStyle="bold"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/nameBox"
        app:layout_constraintTop_toBottomOf="@+id/header"
        app:layout_constraintBottom_toTopOf="@+id/rollnoLbl" />

    <EditText
        android:id="@+id/nameBox"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:minHeight="48dp"
        android:hint="Enter Student Name"
        android:inputType="text"
        app:layout_constraintStart_toEndOf="@+id/nameLbl"
        app:layout_constraintTop_toBottomOf="@+id/header"
        app:layout_constraintBottom_toTopOf="@+id/rollnoBox"
```

```
app:layout_constraintEnd_toEndOf="parent"/>
```

```
<TextView
    android:id="@+id/rollnoLbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Roll No"
    android:textStyle="bold"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/nameLbl"
    app:layout_constraintEnd_toStartOf="@+id/rollnoBox"
    app:layout_constraintBottom_toTopOf="@+id/delbl"/>
```

```
<EditText
    android:id="@+id/rollnoBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:minHeight="48dp"
    android:hint="Enter Student RollNo"
    android:inputType="text"
    app:layout_constraintStart_toEndOf="@+id/rollnoLbl"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintBottom_toTopOf="@+id/delbl"
    app:layout_constraintTop_toBottomOf="@+id/nameBox"/>
```

```
<TextView
    android:id="@+id/delbl"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Discipline Elective"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/electivesBox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.054"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/rollnoLbl" />
```

```
<Spinner
    android:id="@+id/electivesBox"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:minHeight="48dp"
    app:layout_constraintBottom_toTopOf="@+id/SubmitBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/delbl"/>
```

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

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit"
        android:onClick="displayDetails"
        app:layout_constraintTop_toBottomOf="@+id/electivesBox"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintBottom_toTopOf="@+id/result"
        app:layout_constraintEnd_toStartOf="@+id/ResetBtn"/>

<Button
    android:id="@+id/ResetBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Reset"
    android:onClick="resetDetails"
    app:layout_constraintStart_toEndOf="@+id/SubmitBtn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/electivesBox"
    app:layout_constraintBottom_toTopOf="@+id/result"/>

<TextView
    android:id="@+id/result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:gravity="center_horizontal"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/SubmitBtn"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

### **strings.xml:**

```

<resources>
    <string name="app_name">DESelectionSpinner</string>
    <string-array name="courses">
        <item>Mobile Application Development</item>
        <item>Java Full Stack</item>
        <item>.Net Full Stack</item>
    </string-array>
</resources>

```

### **MainActivity.java:**

```

package com.example.deselectionspinner;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;

```



```

import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    EditText name,rollno;
    Spinner elec;
    TextView res;
    String selectedCourse;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        name = findViewById(R.id.nameBox);
        rollno = findViewById(R.id.rollnoBox);
        elec = findViewById(R.id.electivesBox);
        res = findViewById(R.id.result);
        ArrayAdapter adapter = new ArrayAdapter(this,
android.R.layout.simple_spinner_item,getResources().getStringArray(R.array.courses));
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        elec.setAdapter(adapter);
        elec.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
                selectedCourse = parent.getItemAtPosition(position).toString();
            }

            @Override
            public void onNothingSelected(AdapterView<?> parent) {

            }
        });
    }
    public void displayDetails(View v) {
        res.setText("Name: "+name.getText().toString()+"\nRoll No:
"+rollno.getText().toString()+"\nSelected Course: "+selectedCourse);
    }
    public void resetDetails(View v){
        name.setText("");
        rollno.setText("");
        res.setText("");
    }
}

```

## Output:

The image displays three sequential screenshots of a mobile application interface titled "Electives Selection".

**Screenshot 1 (Left):** Shows the initial form with empty input fields. The fields are labeled "Student Name" (with placeholder "Enter Student Name"), "Roll No" (with placeholder "Enter Student RollNo"), and "Discipline Elective" (with a dropdown menu currently showing "Mobile Application Development"). At the bottom are "Submit" and "Reset" buttons.

**Screenshot 2 (Middle):** Shows the form filled with sample data. "Student Name" is "Sindhuri", "Roll No" is "202121CSE0001", and "Discipline Elective" is "Java Full Stack". The "Submit" and "Reset" buttons are still present.

**Screenshot 3 (Right):** Shows the form after submission. The input fields are now disabled (grayed out). Below the form, the submitted information is displayed: "Name: Sindhuri", "Roll No: 202121CSE0001", and "Selected Course: Java Full Stack". The "Submit" and "Reset" buttons remain at the bottom.