Experiment 2.2

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1. Aim:

To create an android app using various controls such TextEdit, CheckBox, RadioButton, RadioGroup, etc.

2. Objective:

To learn about the App widget and how to use them.
Learn to scroll and drag in android studio.

3. Code and output:

```
package com.example.my15;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Context;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    RadioGroup radioGroup;
    RadioButton radioButton;
    TextView textView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        radioGroup=findViewById(R.id.radioGroup);
        textView=findViewById(R.id.textView);
```

```java
Button buttonApply = findViewById(R.id.button);
buttonApply.setOnClickListener(new View.OnClickListener(){
    public void onClick(View v){
        int radioId = radioGroup.getCheckedRadioButtonId();
        radioButton = findViewById(radioId);
        textView.setText("Your choice: "+radioButton.getText());
    }
});
}
public void checkButton(View v){
    int radioId = radioGroup.getCheckedRadioButtonId();
    radioButton = findViewById(radioId);
    Context context;
    Toast.makeText(this, "Selected Radio Button: "+
    radioButton.getText(),Toast.LENGTH_SHORT).show();
}
}
```

XML :-

```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">

    <RadioGroup
        android:id="@+id/radioGroup"
        android:layout_width="251dp"
        android:layout_height="193dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.496"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.465">

        <RadioButton
            android:id="@+id/radioButton5"
```

```xml
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="checkButton"
        android:text="Computer Networking" />

    <RadioButton
        android:id="@+id/radioButton6"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="checkButton"
        android:text="Information Security" />

    <RadioButton
        android:id="@+id/radioButton8"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="checkButton"
        android:text="Mobile Application Development" />

    <RadioButton
        android:id="@+id/radioButton4"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="checkButton"
        android:text="Theory of Computation" />

</RadioGroup>

<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="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.855" />

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