

Slip 10

Q.2] Write a program to draw GUI by using Spinner, Buttons.

Ans.

```
<?xml version="1.0" encoding="utf-8"?>

<RelativeLayout
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"    tools:context=".MainActivity">

    <EditText    android:id="@+id/editTextItem"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_margin="16dp"
android:hint="Enter Item:" />

    <Button
        android:id="@+id/buttonAdd"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@id/editTextItem"
android:layout_marginTop="16dp"
android:layout_centerHorizontal="true"    android:text="Add to
Spinner"    android:onClick="addItemToSpinner" />

    <Button    android:id="@+id/buttonRemove"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@id/buttonAdd"
```

```
android:layout_marginTop="16dp"
android:layout_centerHorizontal="true"
android:text="Remove from Spinner"
android:onClick="removeItemFromSpinner" />
```

```
<Spinner      android:id="@+id/spinnerItems"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_below="@id/buttonRemove"
android:layout_margin="16dp" />
```

```
</RelativeLayout>
```

MainActivity.java- package

```
com.example.myapplication;
```

```
import android.os.Bundle; import
android.view.View; import
android.widget.ArrayAdapter; import
android.widget.EditText; import
android.widget.Spinner;
```

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

```
import java.util.ArrayList; import
java.util.List;
```

```
public class MainActivity extends AppCompatActivity {    private EditText
editTextItem;    private Spinner spinnerItems;    private List<String>
itemsList;    private ArrayAdapter<String> spinnerAdapter;
```

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

```
        editTextItem = findViewById(R.id.editTextItem);        spinnerItems =
findViewById(R.id.spinnerItems);
```

```
        // Initialize items list and spinner adapter        itemsList
= new ArrayList<>();        spinnerAdapter = new
ArrayAdapter<>(this,
android.R.layout.simple_spinner_item, itemsList);
```

```
spinnerAdapter.setDropDownViewResource(android.R.layout.sim
ple_spinner_dropdown_item);        spinnerItems.setAdapter(spinnerAdapter);
    }
```

```
    public void addItemToSpinner(View view) {
        String item = editTextItem.getText().toString().trim();
        if (!item.isEmpty()) {            itemsList.add(item);
spinnerAdapter.notifyDataSetChanged();
editTextItem.setText("");
        }
    }
```

```
    public void removeItemFromSpinner(View view) {
```

```
        if (itemsList.isEmpty()) {  
return;  
        }
```

```
        int selectedItemPosition = spinnerItems.getSelectedItemPosition();  
        if (selectedItemPosition != Spinner.INVALID_POSITION) {  
itemsList.remove(selectedItemPosition);  
spinnerAdapter.notifyDataSetChanged();  
        }  
    }  
}
```