Slip no – 10

Q1. Create an Android Application that Demonstrate Switch and Toggle Button.

activity\_main.xml

<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">  
  
 <Switch  
 *android:id*="@+id/switchButton"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Switch"  
 *android:layout\_marginTop*="50dp"  
 *android:layout\_centerHorizontal*="true"/>  
  
 <ToggleButton  
 *android:id*="@+id/toggleButton"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:textOff*="Off"  
 *android:textOn*="On"  
 *android:layout\_below*="@id/switchButton"  
 *android:layout\_marginTop*="20dp"  
 *android:layout\_centerHorizontal*="true"/>  
  
</RelativeLayout>

MainActivity.java

*package* com.example.slipno5;  
  
*import* android.os.Bundle;  
*import* android.widget.CompoundButton;  
*import* android.widget.Switch;  
*import* android.widget.Toast;  
*import* android.widget.ToggleButton;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 *private* Switch switchButton;  
 *private* ToggleButton toggleButton;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 switchButton = findViewById(R.id.*switchButton*);  
 toggleButton = findViewById(R.id.*toggleButton*);  
  
 switchButton.setOnCheckedChangeListener(*new* CompoundButton.OnCheckedChangeListener() {  
 @Override  
 *public void* onCheckedChanged(CompoundButton buttonView, *boolean* isChecked) {  
 *if* (isChecked) {  
 *// Switch is ON* Toast.*makeText*(MainActivity.*this*, "Switch is ON", Toast.***LENGTH\_SHORT***).show();  
 } *else* {  
 *// Switch is OFF* Toast.*makeText*(MainActivity.*this*, "Switch is OFF", Toast.***LENGTH\_SHORT***).show();  
 }  
 }  
 });  
  
 toggleButton.setOnCheckedChangeListener(*new* CompoundButton.OnCheckedChangeListener() {  
 @Override  
 *public void* onCheckedChanged(CompoundButton buttonView, *boolean* isChecked) {  
 *if* (isChecked) {  
 *// ToggleButton is ON* Toast.*makeText*(MainActivity.*this*, "ToggleButton is ON", Toast.***LENGTH\_SHORT***).show();  
 } *else* {  
 *// ToggleButton is OFF* Toast.*makeText*(MainActivity.*this*, "ToggleButton is OFF", Toast.***LENGTH\_SHORT***).show();  
 }  
 }  
 });  
 }  
}

Q2. Demonstrate Array Adapter using List View to display list of fruits.

activity\_main.xml

<?*xml version*="1.0" *encoding*="utf-8"?>  
<RelativeLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent">  
  
 <ListView  
 *android:id*="@+id/fruit\_list"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent" />  
  
</RelativeLayout>

MainActivity.java

*package* com.example.slipno5;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.AdapterView;  
*import* android.widget.ArrayAdapter;  
*import* android.widget.ListView;  
*import* android.widget.Toast;  
  
*public class* MainActivity *extends* AppCompatActivity {  
 String[] fruitArray = {"Apple", "Mango", "Banana", "Blackberry", "Pineapple", "Strawberry"};  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 ArrayAdapter adapter = *new* ArrayAdapter<String>(*this*, android.R.layout.***simple\_list\_item\_1***, fruitArray);  
 ListView listView = findViewById(R.id.*fruit\_list*);  
 listView.setAdapter(adapter);  
  
 *// Set item click listener* listView.setOnItemClickListener(*new* AdapterView.OnItemClickListener() {  
 @Override  
 *public void* onItemClick(AdapterView<?> parent, View view, *int* position, *long* id) {  
 *// Get the selected item* String selectedItem = (String) parent.getItemAtPosition(position);  
  
 *// Show toast message* Toast.*makeText*(MainActivity.*this*, "Selected: " + selectedItem, Toast.***LENGTH\_SHORT***).show();  
 }  
 });  
 }  
}