

## Practical 14

1. Write a Program to display the following output.

Xml Code :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:gravity="center"
    android:orientation="vertical"
    android:background="@color/black"
    >
    <ListView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/list1"
        android:divider="@color/white"
        android:dividerHeight="3dp"
        android:listSelector="#00008B"
    />
</LinearLayout>
```

Activity\_listview.xml Code :

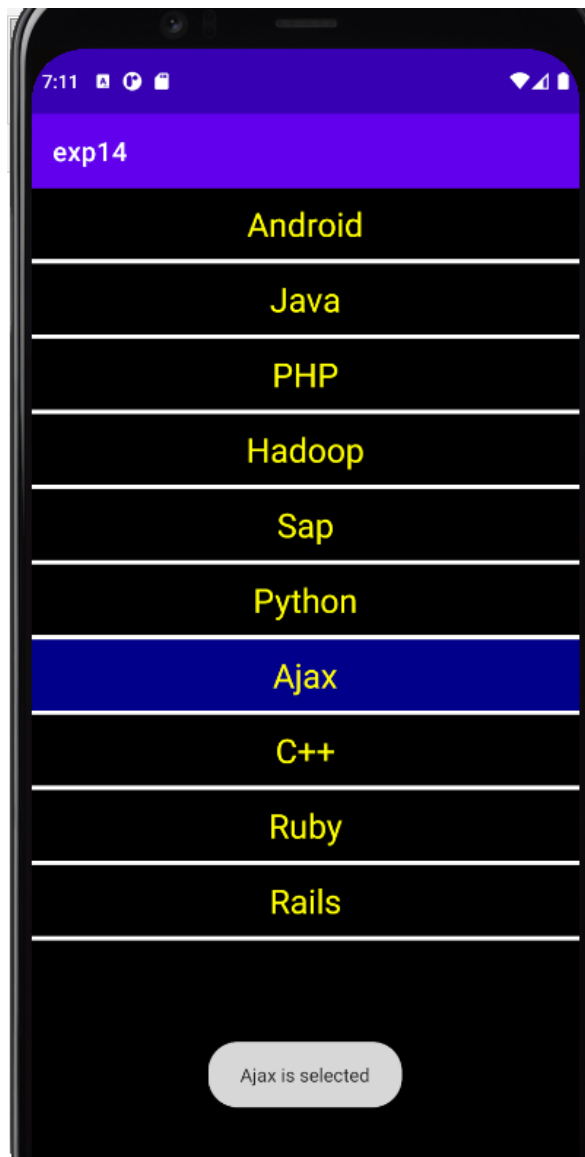
```
<?xml version="1.0" encoding="utf-8"?>
<TextView xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/txtview"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_gravity="center"
    android:gravity="center"
    android:padding="10dp"
    android:textSize="25dp"
    android:textColor="#FFFF00"
    >
</TextView>
```

Java Code :

```
package com.example.exp14;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final String[] items =
{"Android","Java","PHP","Hadoop","Sap","Python","Ajax","C++","Ruby","Rails"};
        ArrayAdapter arrayAdapter = new ArrayAdapter<String>(this,R.layout.activity_listview,items);
        ListView l1 = (ListView) findViewById(R.id.list1);
        l1.setAdapter(arrayAdapter);
        l1.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
                Toast.makeText(getApplicationContext(), ((TextView)view).getText() + " is selected",
                Toast.LENGTH_LONG).show();
            }
        });
    }
}
```

## Output:



## 2. Write a Program to create a Grid View and display the name of different phones and operating system and toast selected Phone.

### Xml Code :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical">
    <GridView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/gview"
        android:padding="10dp"
        android:numColumns="3"
        android:listSelector="@color/purple_200"
        android:horizontalSpacing="10sp"
        android:verticalSpacing="10sp"
        android:layout_marginTop="30dp"/>
</LinearLayout>
```

### Activity\_grid\_view.xml Code :

```
<?xml version="1.0" encoding="utf-8"?>
<TextView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/tview"
    android:fontFamily="casual"
    android:gravity="center"
    android:padding="10dp"
    android:textSize="20dp"
    android:textStyle="italic|bold"
    android:textColor="@color/black"
    android:background="@drawable/bg"
    >
</TextView>
```

### Java Code :

```
package com.example.exp14;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.GridView;
import android.widget.TextView;
import android.widget.Toast;
```

```
public class MainActivity2 extends AppCompatActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main2);  
        final String[] OS =  
{"Adnroid","Windows","Samsung","Nokia","Linux","Ubuntu","Apple","Xiaomi","Realme"};  
        ArrayAdapter arrayAdapter = new ArrayAdapter<String>(this, R.layout.activity_grid_view, OS);  
        GridView gv = (GridView) findViewById(R.id.gview);  
        gv.setAdapter(arrayAdapter);  
        gv.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
            @Override  
            public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {  
                Toast.makeText(getApplicationContext(),((TextView)view).getText() + " is  
selected",Toast.LENGTH_LONG).show();  
            }  
        });  
    }  
}
```

## Output:

