

### Lab Exercise

#### **PART A**

1. Develop Android App to Demonstrate Button Event with Toast Message.

##### **activity\_main.xml**

```
<LinearLayout 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"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:orientation="vertical"
    android:paddingBottom="@dimen/activity_vertical_margin" tools:context=".MainActivity">
    <TextView
        android:text="Welcome to Android Lab"
        android:textSize="20dp"
        android:gravity="center"
        android:textStyle="bold"
        android:paddingBottom="20dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btn1"
        android:text="Submit"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
</LinearLayout>
```

### MainActivity.java

```
package com.example.ram.myapplication1;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity implements View.OnClickListener {

    @Override

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

        Button b1=(Button)findViewById(R.id.btn1);

        b1.setOnClickListener(this);
    }

    @Override

    public void onClick(View v) {

        Toast.makeText(MainActivity.this,"Welcome to Android
Lab",Toast.LENGTH_LONG).show();

    }

}
```

**Output:**



2. Develop Android App to Demonstrate to change Background theme and display logo.

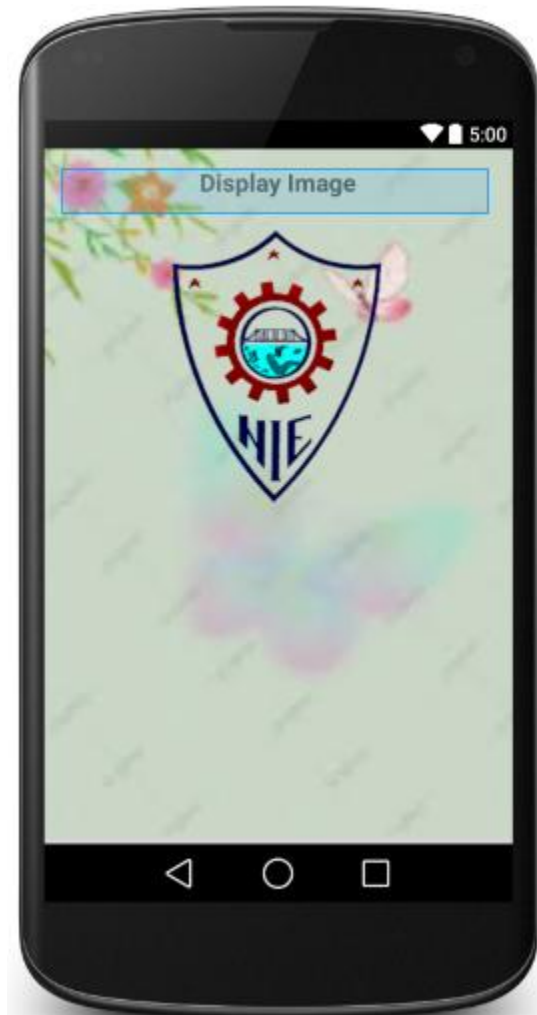
**activity\_image.xml**

```
<LinearLayout 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"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:orientation="vertical"
    android:background="@drawable/bgtheme"
    tools:context="com.example.ram.myapplication1.ImageActivity">
```

```
<TextView
    android:text="Display Logo"
    android:gravity="center">
```

```
android:textSize="20dp"  
android:textStyle="bold"  
android:paddingBottom="15dp"  
android:layout_width="match_parent"  
android:layout_height="wrap_content" />  
<ImageView  
android:src="@drawable/nie"  
android:layout_gravity="center"  
android:layout_width="match_parent"  
android:layout_height="wrap_content" />  
  
</LinearLayout>
```

Output:



### 3. Develop Android App to Demonstrate Spinner.

#### activity\_spinner.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"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    tools:context="com.example.ram.myapplication1.SpinnerActivity">

    <Spinner
        android:id="@+id/spinner1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="83dp" />

</RelativeLayout>
```

#### SpinnerActivity.java

```
package com.example.ram.myapplication1;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
```

```
import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Spinner;

import android.widget.Toast;


public class SpinnerActivity extends ActionBarActivity implements
AdapterView.OnItemSelectedListener {

String[] country = { "India", "USA", "China", "Japan", "Other",};

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_spinner);

Spinner spin = (Spinner) findViewById(R.id.spinner1);

spin.setOnItemSelectedListener(this);

ArrayAdapter aa = new
ArrayAdapter(this,android.R.layout.simple_spinner_item,country);
aa.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);

spin.setAdapter(aa);

}

@Override

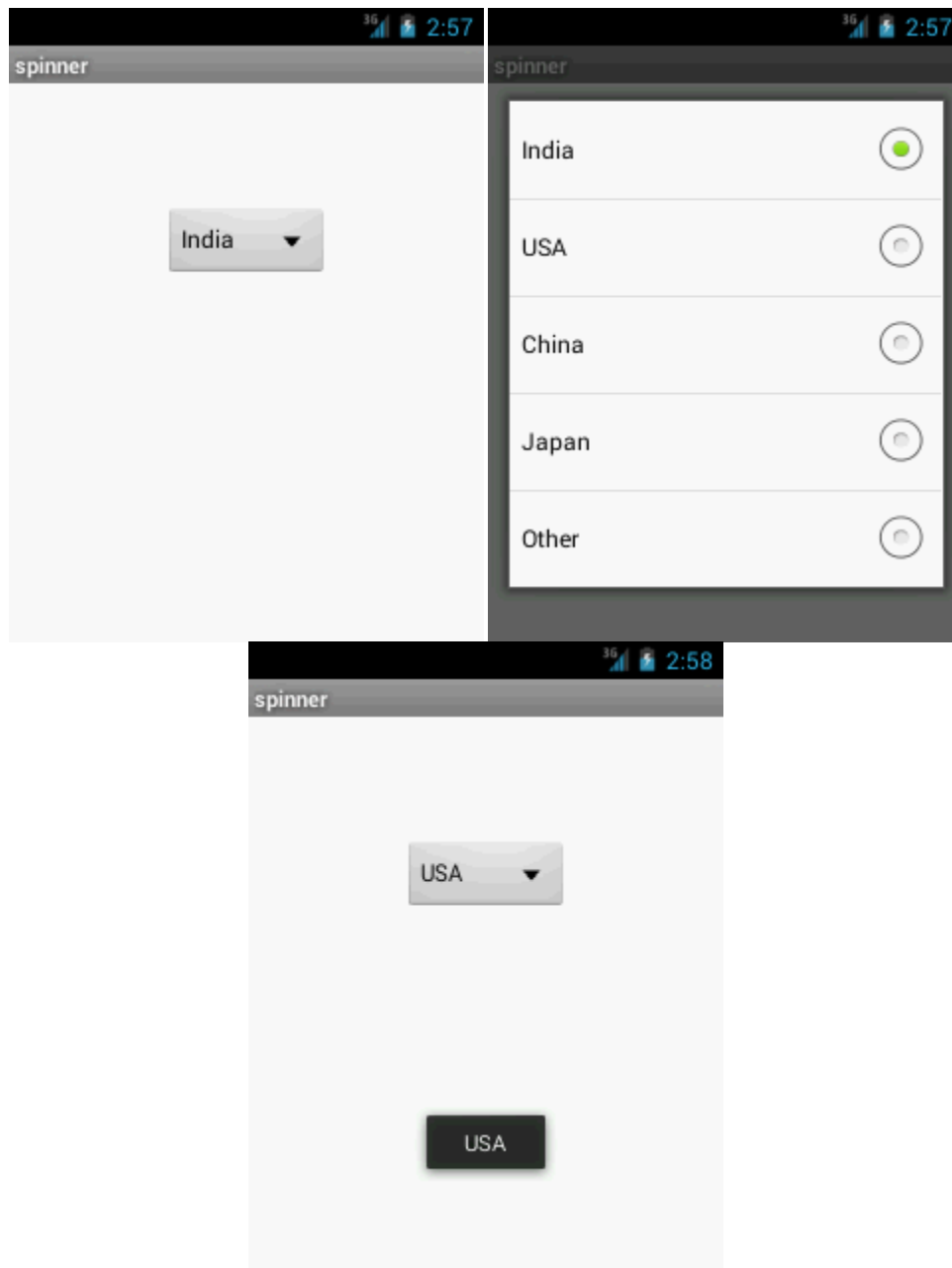
public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {

Toast.makeText(getApplicationContext(),country[position] ,
Toast.LENGTH_LONG).show();

}

}
```

**Output:**



### 4. Develop Android App to Demonstrate Alert Dialog.

#### 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"
    android:paddingLeft="@dimen/activity_horizontal_margin"

    android:paddingRight="@dimen/activity_horizontal_margin"

    android:paddingTop="@dimen/activity_vertical_margin"

    android:paddingBottom="@dimen/activity_vertical_margin"
    tools:context=".MainActivity">

    <TextView

        android:id="@+id/txtv1"

        android:gravity="center"

        android:textSize="20dp"

        android:text="AlertDialog Demo"

        android:layout_width="match_parent"

        android:layout_height="wrap_content" />

    <Button

        android:id="@+id/btn1"

        android:layout_below="@+id/txtv1"

        android:text="Close App"

        android:layout_width="match_parent"

        android:layout_height="wrap_content" />

</RelativeLayout>
```



### MainActivity.java

```
package com.example.ram.myalrtdemo;

import android.app.AlertDialog;
import android.app.Dialog;
import android.content.DialogInterface;
import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;

public class MainActivity extends ActionBarActivity implements View.OnClickListener {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        Button b1=(Button)findViewById(R.id.btn1);

        b1.setOnClickListener(this);

    }

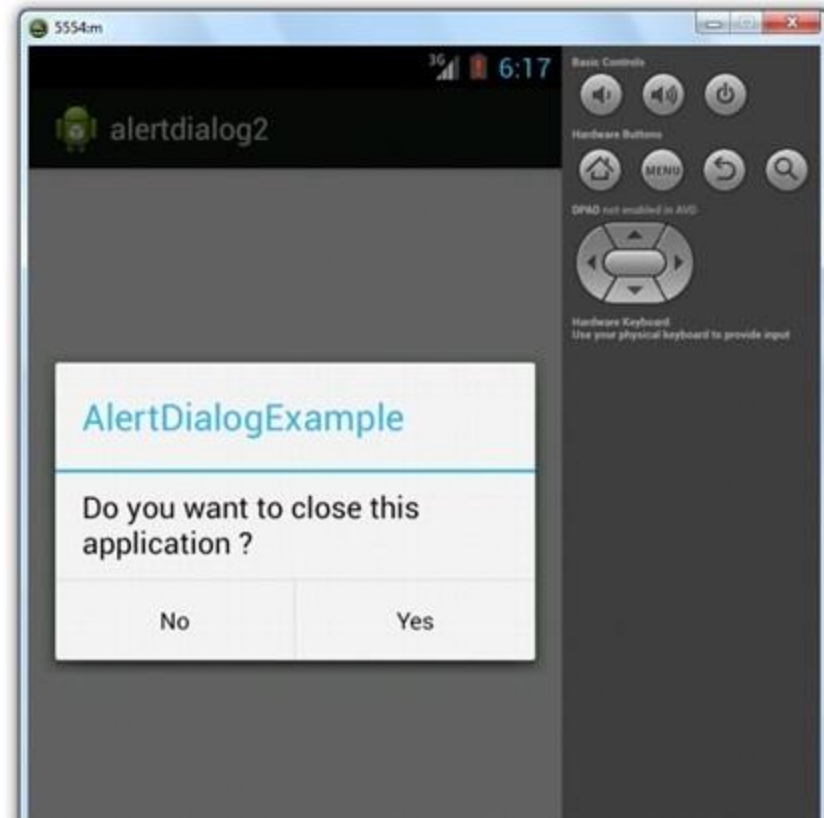
    @Override

    public void onClick(View v) {

        AlertDialog.Builder ab=new AlertDialog.Builder(this);
```

```
ab.setMessage("Do you Want to Close App");
ab.setCancelable(false);
ab.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
    @Override
    public void onClick(DialogInterface dialog, int which) {
        finish();
    }
});
ab.setNegativeButton("No", new DialogInterface.OnClickListener() {
    @Override
    public void onClick(DialogInterface dialog, int which) {
        dialog.cancel();
    }
});
AlertDialog alert = ab.create();
alert.setTitle("AlertDialogExample");
alert.show();
}
```

**Output:**



### 5. Develop Android App to Demonstrate AutoComplete TextView.

#### 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" >
```

```
<TextView
    android:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_alignParentTop="true"
    android:layout_marginTop="15dp"
```

```
        android:text="What_is_your_favourite_programming_language_" />

        <AutoCompleteTextView
            android:id="@+id/autoCompleteTextView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_below="@+id/textView1"
            android:layout_marginLeft="36dp"
            android:layout_marginTop="17dp"
            android:ems="10"
            android:text="">

            <requestFocus />
        </AutoCompleteTextView>

    </RelativeLayout>
```

### MainActivity.java

```
package com.example.autocompletetextview;

import android.os.Bundle;
import android.app.Activity;
import android.graphics.Color;
import android.view.Menu;
import android.widget.ArrayAdapter;
import android.widget.AutoCompleteTextView;

public class MainActivity extends Activity {
    String[] language = {"C","C++","Java",".NET","iPhone","Android","ASP.NET","PHP"};

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

```
ArrayAdapter<String> adapter = new ArrayAdapter<String>
(this,android.R.layout.select_dialog_item,language);
AutoCompleteTextView actv= (AutoCompleteTextView)findViewById(R.id.autoCo
mpleteTextView1);
actv.setThreshold(1);
actv.setAdapter(adapter);
actv.setTextColor(Color.RED);

}

}
```

**Output:**



