

Experiment 14

1.

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<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"
    tools:context="MainActivity">
    <ListView
        android:id="@+id/listView"
        android:layout_width="match_parent"
        android:layout_height="fill_parent" />
</LinearLayout>
```

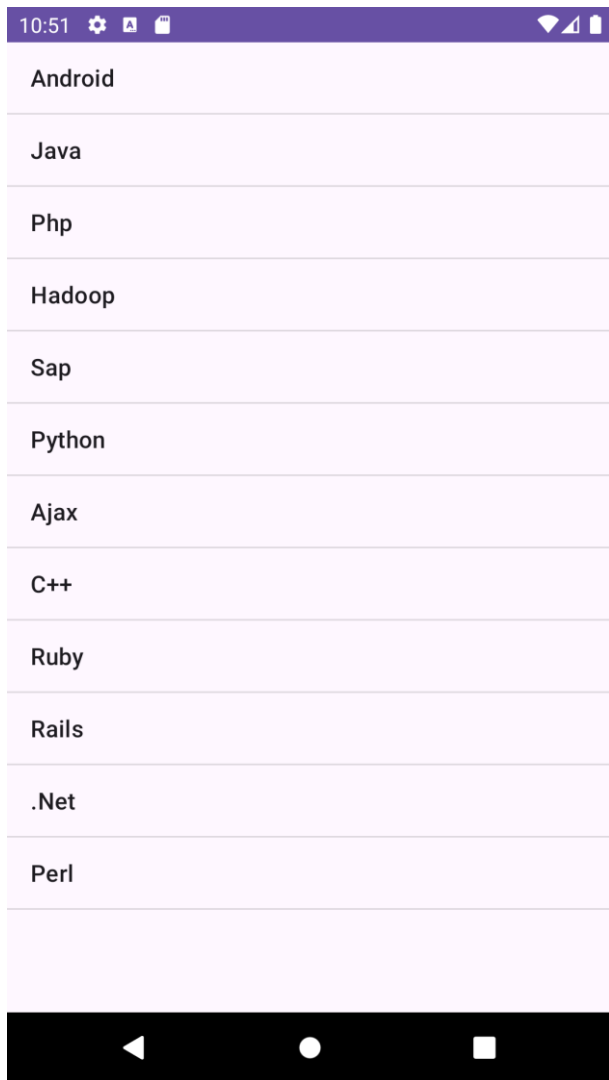
strings_xml:

```
<resources>
    <string name="app_name">ListView</string>
    <string-array name="array_technology">
        <item>Android</item>
        <item>Java</item>
        <item>Php</item>
        <item>Hadoop</item>
        <item>Sap</item>
        <item>Python</item>
        <item>Ajax</item>
        <item>C++</item>
        <item>Ruby</item>
        <item>Rails</item>
        <item>.Net</item>
        <item>Perl</item>
    </string-array>
</resources>
```

MainActivity.java:

```
package com.example.exp14_1;
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 {
    ListView listView;
    TextView textView;
    String[] listItem;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        listView=(ListView)findViewById(R.id.listView);
        listItem = getResources().getStringArray(R.array.array_technology);
        final ArrayAdapter<String> adapter = new ArrayAdapter<String>(this,
        android.R.layout.simple_list_item_1, android.R.id.text1,
        listItem);
        listView.setAdapter(adapter);
        listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> adapterView, View view, int
            position, long l) {
                String value=adapter.getItem(position);
                Toast.makeText(getApplicationContext(),value,
                Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

Output:



2.

Activity_main.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">
    <ImageView
        android:id="@+id/imageView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="90dp"
```

```

        android:layout_marginTop="49dp"
        android:layout_marginEnd="108dp"
        android:layout_marginBottom="448dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/ic1" />
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Change image"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.463"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/imageView"
    app:layout_constraintVertical_bias="0.23" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

MainActivity.java

```

package com.example.exp14_2;
import androidx.annotation.DrawableRes;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    ImageView image_code;
    Button Change_View;
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        image_code=findViewById(R.id.imageView);
    }
}

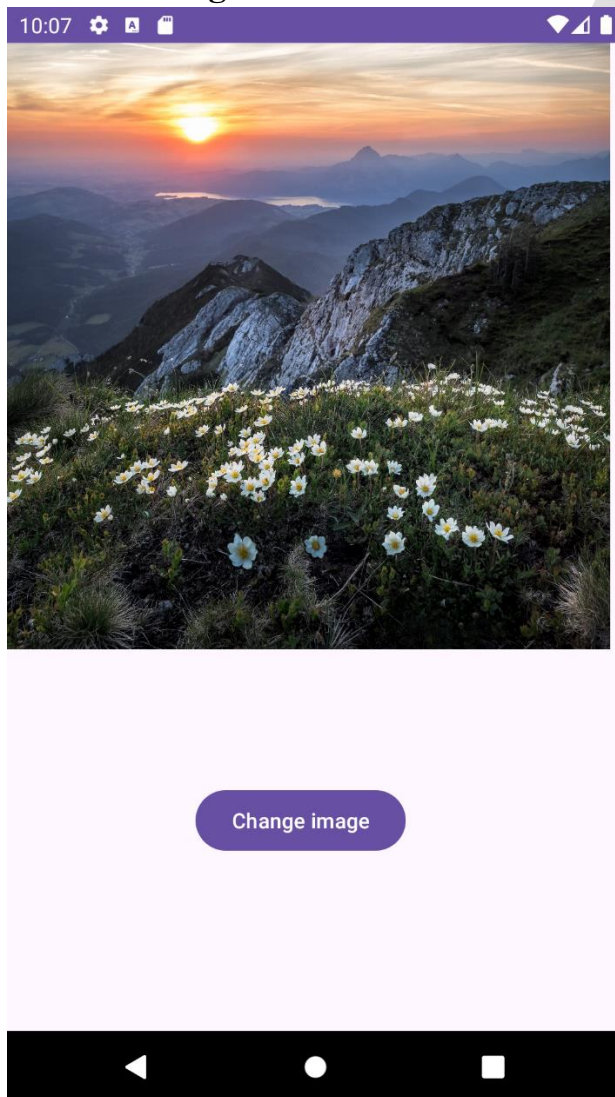
```

```

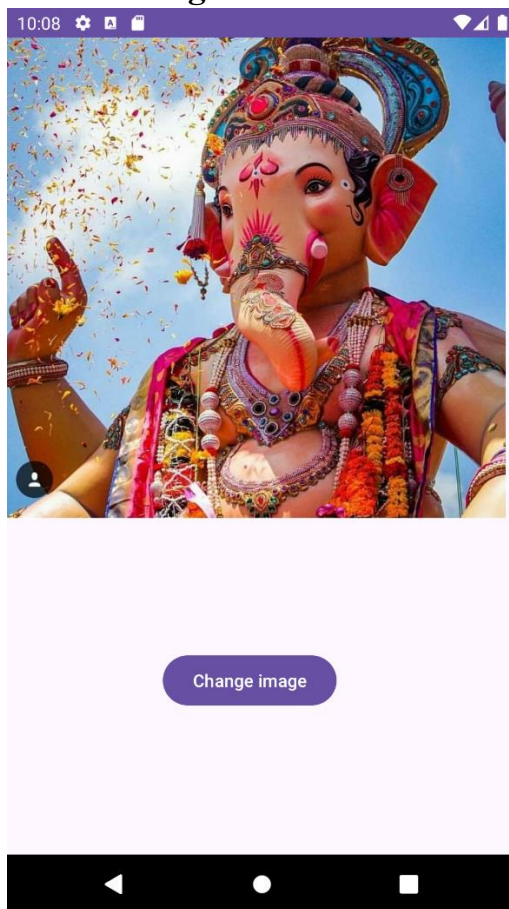
Change_View=findViewById(R.id.button);
Change_View.setOnClickListener(new View.OnClickListener() {
    @SuppressWarnings("ResourceType")
    @Override
    public void onClick(View view) {
        image_code.setImageResource(R.drawable.python);
        Toast.makeText(MainActivity.this, "Image Changed",
            Toast.LENGTH_LONG).show();
    }
});
}
}

```

Output:
Before Changed



After Changed



3.

Activity_main.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">
    <GridView
        xmlns:android="http://schemas.android.com/apk/res/android"
        android:id="@+id/gridView1"
        android:numColumns="auto_fit"
        android:gravity="center"
        android:columnWidth="50dp"
        android:stretchMode="columnWidth"
        android:layout_width="fill_parent"
```

```

        android:layout_height="fill_parent"
        tools:ignore="MissingConstraints">
    </GridView>
</androidx.constraintlayout.widget.ConstraintLayout>

```

MainActivity.java

```

package com.example.exp14_3;
import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
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 MainActivity extends Activity {
    GridView gridView;
    static final String[] numbers = new String[] {
        "1", "2", "3", "4", "5", "6", "7", "8", "9",
        "10", "11", "12", "13", "14", "15"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        gridView = (GridView) findViewById(R.id.gridView1);
        ArrayAdapter<String> adapter = new ArrayAdapter<String>(this,
            android.R.layout.simple_list_item_1, numbers);
        gridView.setAdapter(adapter);
        gridView.setOnItemClickListener(new OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int
                position, long id) {
                Toast.makeText(getApplicationContext(), ((TextView)
                    view).getText(), Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

Output:



4.

Activitiy_main.xml

```
<?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">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Vertical ScrollView example"
        android:id="@+id/textView"
        android:layout_gravity="center_horizontal"
        android:layout_centerHorizontal="true"
        android:layout_alignParentTop="true" />
    <ScrollView android:layout_marginTop="30dp"
        android:layout_width="fill_parent"
```



```
android:layout_height="wrap_content"
android:id="@+id/scrollView">
<LinearLayout
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:orientation="vertical" >
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 1" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 2" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 3" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 4" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 5" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 6" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 7" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 8" />
    <Button
        android:layout_width="fill_parent"
```

```
        android:layout_height="wrap_content"
        android:text="Button 9" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 10" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 11" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 12" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 13" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 14" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 15" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 16" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 17" />
<Button
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:text="Button 18" />
<Button
    android:layout_width="fill_parent"
```

```

        android:layout_height="wrap_content"
        android:text="Button 19" />
    <Button
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Button 20" />
</LinearLayout>
</ScrollView>
</RelativeLayout>

```

MainActivity.java

```

package com.example.exp14_4;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}

```

Output:

