

COURSE OUTCOME 3

PROGRAM NO:1

AIM: Implement Adapters and perform exception handling.

PROGRAM CODE:

XML CODE:

activity_main.xml

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

<RelativeLayout 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">

    <ListView
        android:id="@+id/list"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />

</RelativeLayout>
```

JAVA CODE:

MainActivity.java

```
package com.example.exceptionhandling;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    ListView list ;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        try {

            String[] HEROS = new String[]{"Spiderman", "Batman", "Captian", "Superman", "Minnal
murali", "Hulk", "Iron Man", "Wonder Woman"};

            ArrayAdapter<String> arrayAdapter = new ArrayAdapter(MainActivity.this,
android.R.layout.simple_list_item_1, HEROS);

            list.setAdapter(arrayAdapter);

        }

        catch(Exception e){

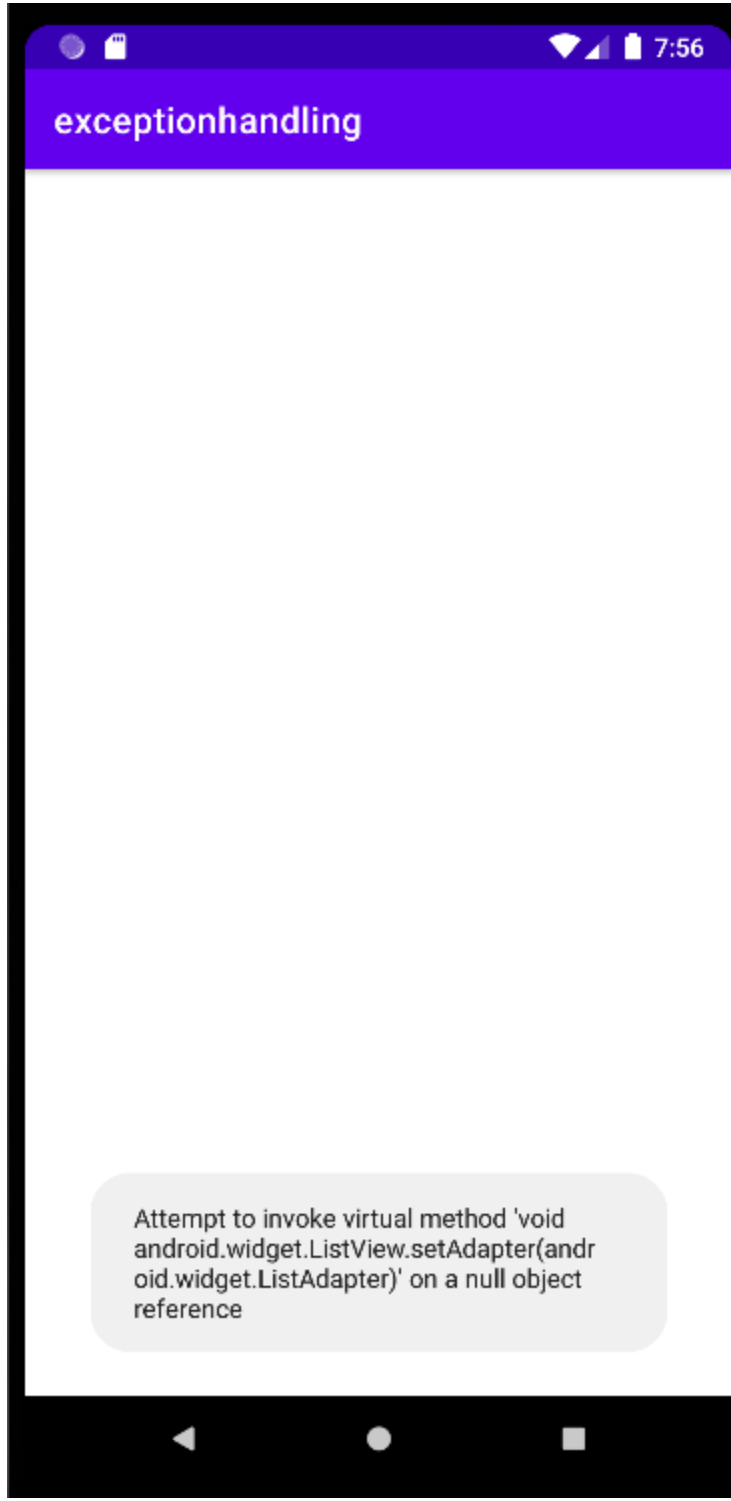
            Toast.makeText(this,e.getMessage(), Toast.LENGTH_SHORT).show();

        }

    }

}
```

OUTPUT



RESULT: The program executed successfully and output is obtained

PROGRAM NO:2

AIM: Implement Intent to navigate between multiple activities

PROGRAM CODE:

XML CODE:

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"
android:background="#EAE5E5"
android:backgroundTint="#F8F2F2"
tools:context=".MainActivity">

    <Button
        android:id="@+id/button"
        android:layout_width="308dp"
        android:layout_height="50dp"
        android:backgroundTint="#673AB7"
        android:onClick="onClick"
        android:text="LinkedIn"
        android:textAllCaps="false"
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.592"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.461" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_main2.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">
```

```
<WebView

    android:id="@+id/webview"

    android:layout_width="409dp"

    android:layout_height="729dp"

    android:layout_marginStart="1dp"

    android:layout_marginTop="1dp"

    android:layout_marginEnd="1dp"

    android:layout_marginBottom="1dp"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVA CODE:

MainActivity.java

```
package com.example.intent1;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;
```

```
public class MainActivity extends AppCompatActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
    }  
    public void onClick(View view) {  
        Intent i = new Intent(Intent.ACTION_VIEW);  
        i.setData(Uri.parse("https://www.linkedin.com"));  
        startActivity(i);  
    }  
}
```

MainActivity2.java

```
package com.example.intent2;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.webkit.WebView;  
import android.webkit.WebViewClient;  
import android.widget.Toast;  
import java.net.URL;  
  
public class MainActivity extends AppCompatActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        Intent i = getIntent();  
        Uri uri = i.getData();
```

```
URL pageurl = null;
if(uri !=null){
    try{
        pageurl = new URL(uri.getScheme(),uri.getHost(),uri.getPath());
    }
    catch ( Exception e) {
        Toast.makeText(getApplicationContext(),"Error Occured",Toast.LENGTH_LONG).show();
    }
}
WebView web =(WebView) findViewById(R.id.webview);
web.setWebViewClient(new WebViewClient());
web.loadUrl(String.valueOf(pageurl));
}
}
```

OUTPUT

INTENT1

LinkedIn

INTENT1

LinkedIn



Open www.linkedin.com links
with Chrome

JUST ONCE

ALWAYS

Use a different app



Zender

Downloader



Join now

Sign in

Welcome to your professional community

Show

Forgot password?

Sign in

or



Sign in with Google



INTENT2

page not available

web page at **http://null/** could not be loaded:
use:

ERR_CLEARTEXT_NOT_PERMITTED

RESULT: The program executed successfully and output is obtained

PROGRAM NO:3

AIM: Develop application that works with explicit intents

PROGRAM CODE:

XML CODE:

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"
    android:background="@color/cardview_shadow_start_color"
    android:onClick="callActivity"
    tools:context=".MainActivity">

    <EditText

        android:id="@+id/name"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="Name"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.437"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.148" />
```

<EditText

```
android:id="@+id/email"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:hint="Email"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.437"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.252" />
```

<EditText

```
android:id="@+id/address"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:hint="Address"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.437"
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.361" />
```

```
<EditText
```

```
    android:id="@+id/phno"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="phonenummer"
    android:inputType="phone"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.437"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.462" />
```

```
<Button
```

```
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Submit"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.454"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.609" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_main2.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:background="@color/teal_200"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity2">
```

```
<TextView
    android:id="@+id/view3"
    android:layout_width="189dp"
    android:layout_height="36dp"
    android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.459"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.398" />
```

```
<TextView
    android:id="@+id/view1"
    android:layout_width="189dp"
    android:layout_height="36dp"
    android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.459"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.22" />
```

<TextView

```
android:id="@+id/view2"
android:layout_width="189dp"
android:layout_height="36dp"
android:textAlignment="center"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.459"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.306" />
```

<TextView

```
android:id="@+id/view4"
android:layout_width="189dp"
android:layout_height="36dp"
android:text="TextView"
android:textAlignment="center"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.459"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/view3"
app:layout_constraintVertical_bias="0.117" />
```


</androidx.constraintlayout.widget.ConstraintLayout>

JAVA CODE:

MainActivity.java

```
package com.example.explicitintent;

import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void callActivity(View view) {

        Intent i = new Intent(getApplicationContext(), MainActivity2.class);
        final EditText editText1 = (EditText) findViewById(R.id.name);
        String msg = editText1.getText().toString();
        final EditText editText2 = (EditText) findViewById(R.id.email);
        String email = editText2.getText().toString();
        final EditText editText3 = (EditText) findViewById(R.id.address);
        String add = editText3.getText().toString();
        final EditText editText4 = (EditText) findViewById(R.id.phno);
        String ph = editText4.getText().toString();

        i.putExtra("Value1", msg);
        i.putExtra("Value2", add);
        i.putExtra("Value3", email);
        i.putExtra("Value4", ph);
        startActivity(i);
    }
}
```

```
}  
}
```

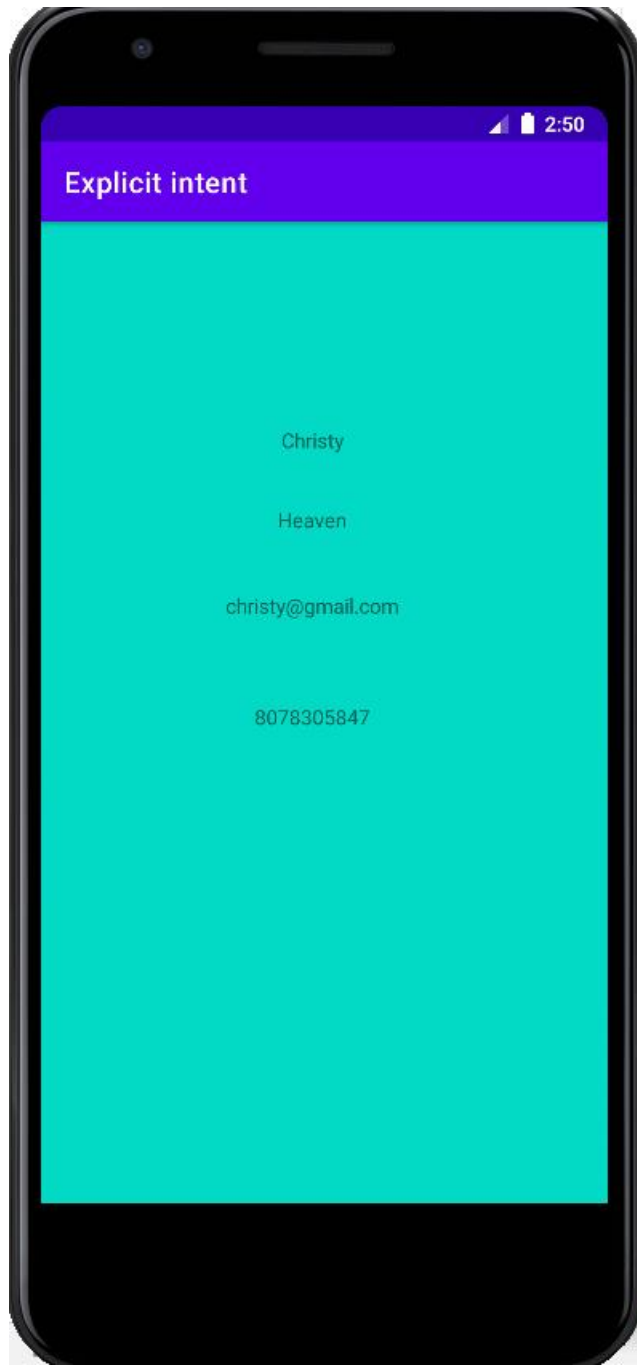
MainActivity2.java

```
package com.example.explicitintent;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
import android.widget.TextView;  
  
public class MainActivity2 extends AppCompatActivity {  
  
    TextView view1;  
  
    TextView view2;  
  
    TextView view3;  
  
    TextView view4;  
  
    @Override  
  
    protected void onCreate(Bundle savedInstanceState) {  
  
        super.onCreate(savedInstanceState);  
  
        setContentView(R.layout.activity_main2);  
  
        view1 = (TextView) findViewById(R.id.view1);  
  
        view2 = (TextView) findViewById(R.id.view2);  
  
        view3 = (TextView) findViewById(R.id.view3);  
  
        view4 = (TextView) findViewById(R.id.view4);  
  
        Bundle extras = getIntent().getExtras();  
  
        String value1 = extras.getString("Value1");  
  
        String value2 = extras.getString("Value2");  
  
        String value3 = extras.getString("Value3");  
  
        String value4 = extras.getString("Value4");  
  
        view1.setText(value1);  
  
        view2.setText(value2);  
  
        view3.setText(value3);  
  
        view4.setText(value4);  
  
    }  
}
```

}

OUTPUT

The image shows a mobile application interface on a smartphone. The status bar at the top right displays a signal strength icon, a battery icon, and the time 2:50. The app's title bar is purple and contains the text 'Explicit intent'. Below the title bar, there are four text input fields stacked vertically. The first field contains 'Christy', the second contains 'christy@gmail.com', the third contains 'Heaven', and the fourth contains '8078305847' with a red cursor at the end. Below these fields is a purple button with the text 'SUBMIT' in white capital letters.



RESULT: The program executed successfully and output is obtained

PROGRAM NO:4

AIM: Implement Options Menu to navigate to activities

PROGRAM CODE:

XML CODE:

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">

    <TextView

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_home.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=".home">

    <TextView

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Home"
        android:textSize="30sp"
        android:textStyle="bold"
        tools:ignore="MissingConstraints" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_contact.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=".contact">

    <TextView

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Contact"
```

```
        android:textSize="30sp"
        android:textStyle="bold"
        tools:ignore="MissingConstraints" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_setting.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=".settings">
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Settings"
    android:textSize="30sp"
    android:textStyle="bold"
    tools:ignore="MissingConstraints" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_share.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=".share">
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Share"
    android:textSize="30sp"
    android:textStyle="bold"
    tools:ignore="MissingConstraints" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVA CODE:

MainActivity.java

```
package com.example.optionmenu;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;

public class MainActivity extends AppCompatActivity {

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

    @Override
```



```
public boolean onCreateOptionsMenu(Menu menu){
    MenuInflater inflater=getMenuInflater();
    inflater.inflate(R.menu.menu_menuoption,menu);
    return true;
    //return super.onCreateOptionsMenu(menu);
}

@Override
public boolean onOptionsItemSelected(@NonNull MenuItem item){
    int id=item.getItemId();
    if(id==R.id.action_settings)
    {
        Intent set=new Intent(MainActivity.this,settings.class);
        startActivity(set);
    }
    if(id==R.id.action_home)
    {
        Intent home=new Intent(MainActivity.this,home.class);
        startActivity(home);
    }
    if(id==R.id.action_contact)
    {
        Intent contact=new Intent(MainActivity.this,contact.class);
        startActivity(contact);
    }
    if(id==R.id.action_share)
    {
        Intent share=new Intent(MainActivity.this,share.class);
        startActivity(share);
    }
    return super.onOptionsItemSelected(item);
}
```

```
}  
}
```

Home.java

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

Contact.java

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

```
}  
}
```

Settings.java

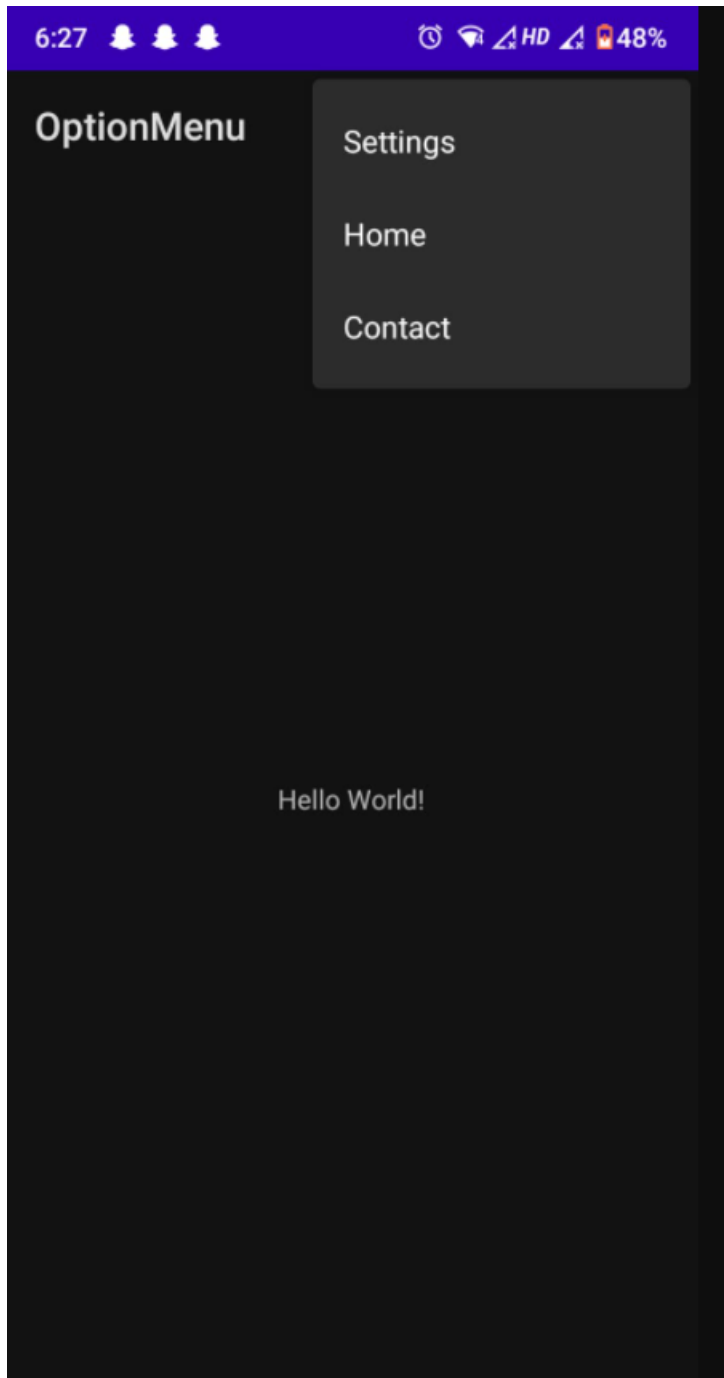
```
package com.example.optionmenu;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class settings extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState); 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

Settings.java

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

```
}  
}
```

OUTPUT

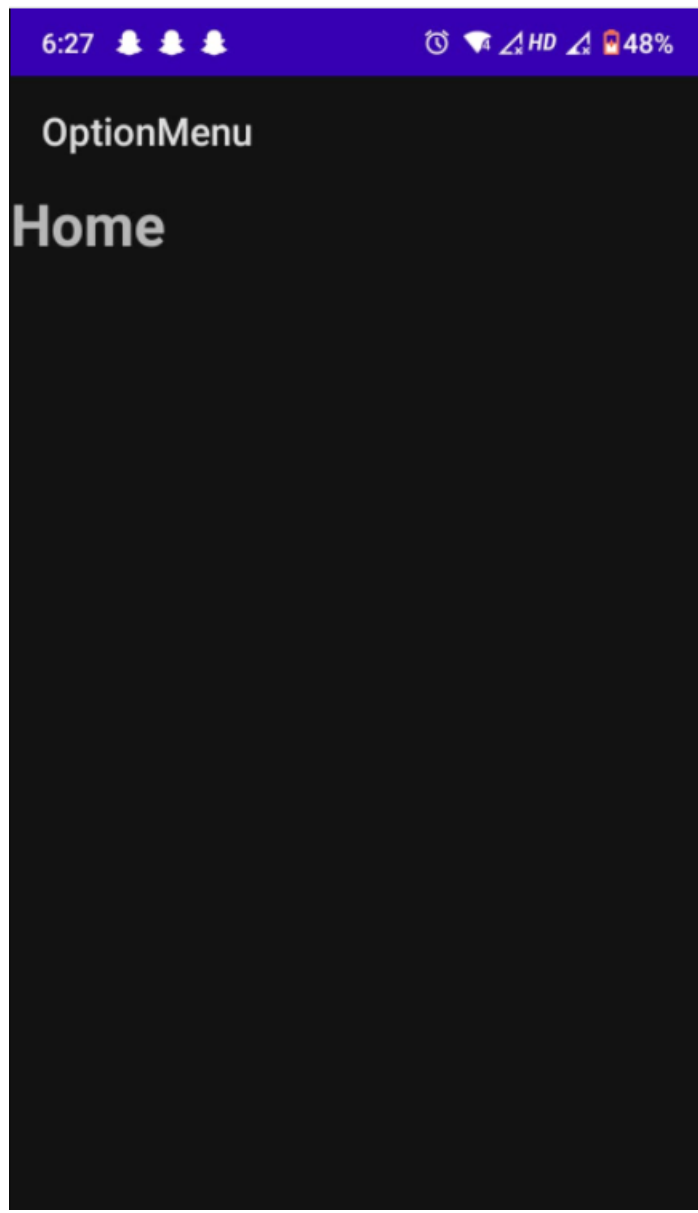


6:27



OptionsMenu

Contact



RESULT: The program executed successfully and output is obtained

PROGRAM NO:5

AIM: Develop an application that uses ArrayAdapter with ListView.

PROGRAM CODE:

XML CODE:

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">

    <ListView
        android:id="@+id/listview"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        tools:layout_editor_absoluteX="1dp"
        tools:layout_editor_absoluteY="1dp"
        tools:ignore="MissingConstraints" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVA CODE:

MainActivity.java

```
package com.example.arrayadapter;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.ListView;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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

        ListView list=findViewById(R.id.listview);

        String[] item=new String[]{"Recent","Pictures","Video","Documents","Bin","Settings"};

        ArrayAdapter<String> myAdapter=new ArrayAdapter<String>(MainActivity.this,
        android.R.layout.simple_list_item_1,item);

        list.setAdapter(myAdapter);

        list.setOnItemClickListener(new AdapterView.OnItemClickListener() {

            @Override
            public void onItemClick(AdapterView<?> parent,View view,int position,long id) {
```



```
        String item_name=item[position];

        Toast.makeText(MainActivity.this,item_name, Toast.LENGTH_SHORT).show();

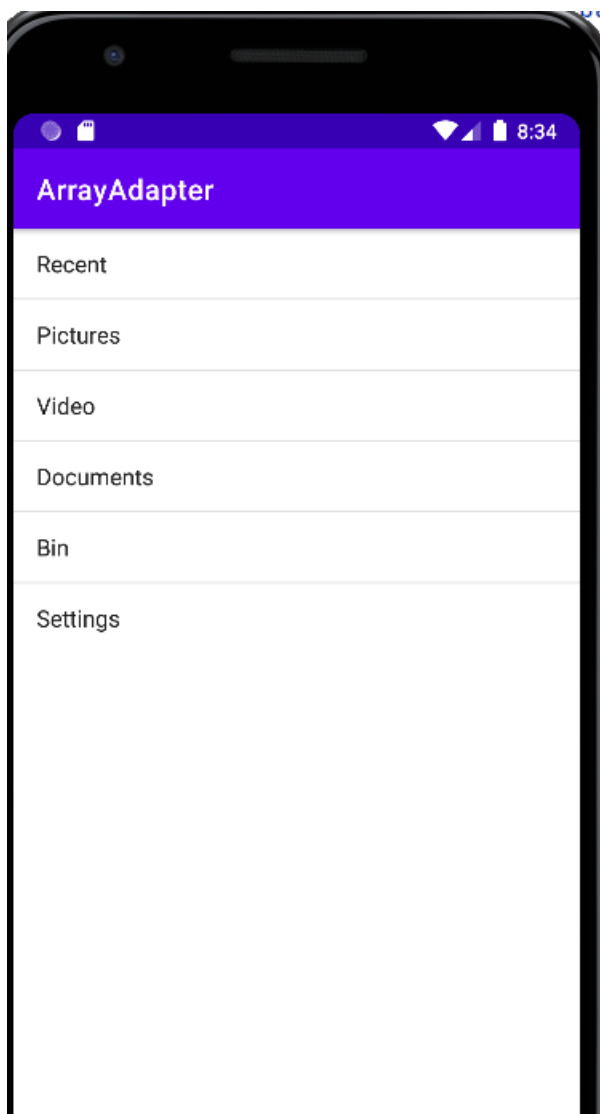
    }

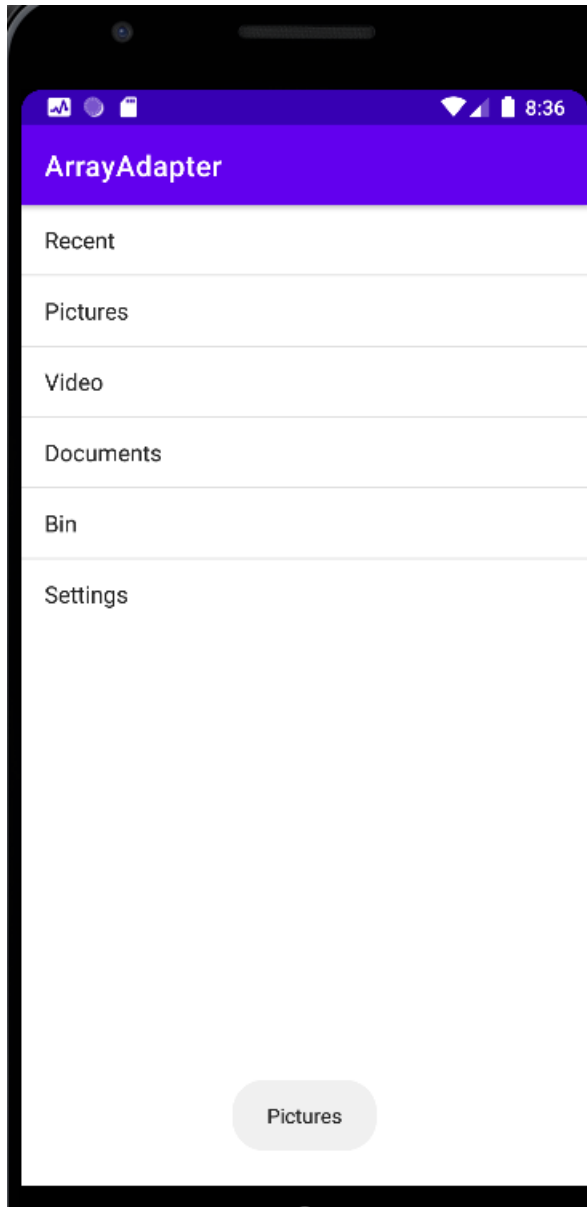
    });

}

}
```

OUTPUT





RESULT: The program executed successfully and output is obtained