

COURSE OUTCOME - 3

PROGRAM - 9

AIM:

Implement Adapters and perform exception handling.

PROGRAM CODE:

JAVA CODE:

```
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);

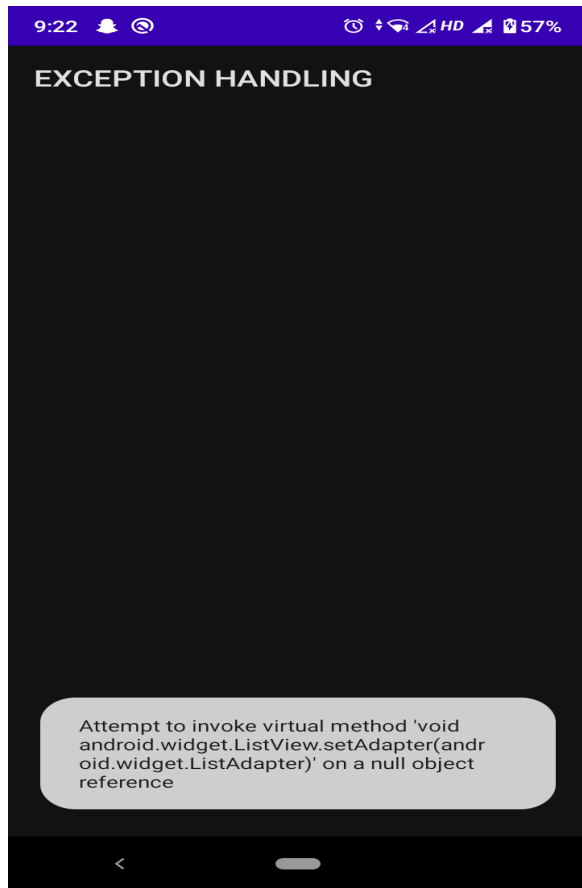
        }
```

```
        catch(Exception e){  
            Toast.makeText(this,e.getMessage(), Toast.LENGTH_SHORT).show();  
        }  
    }  
}
```

XML CODE:

```
<?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>
```

OUTPUT:



RESULT:

The program executed successfully and obtained the output.

PROGRAM - 10

AIM:

Implement Intent to navigate between multiple activities.

PROGRAM CODE:

JAVA CODE:

INTENT1

```
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);
    }
}
```

INTENT2

```
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));
    }
}

```

XML CODE:

INTENT1

```

<?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>
```

INTENT2

```
<?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>
```

Android_manifest.xml

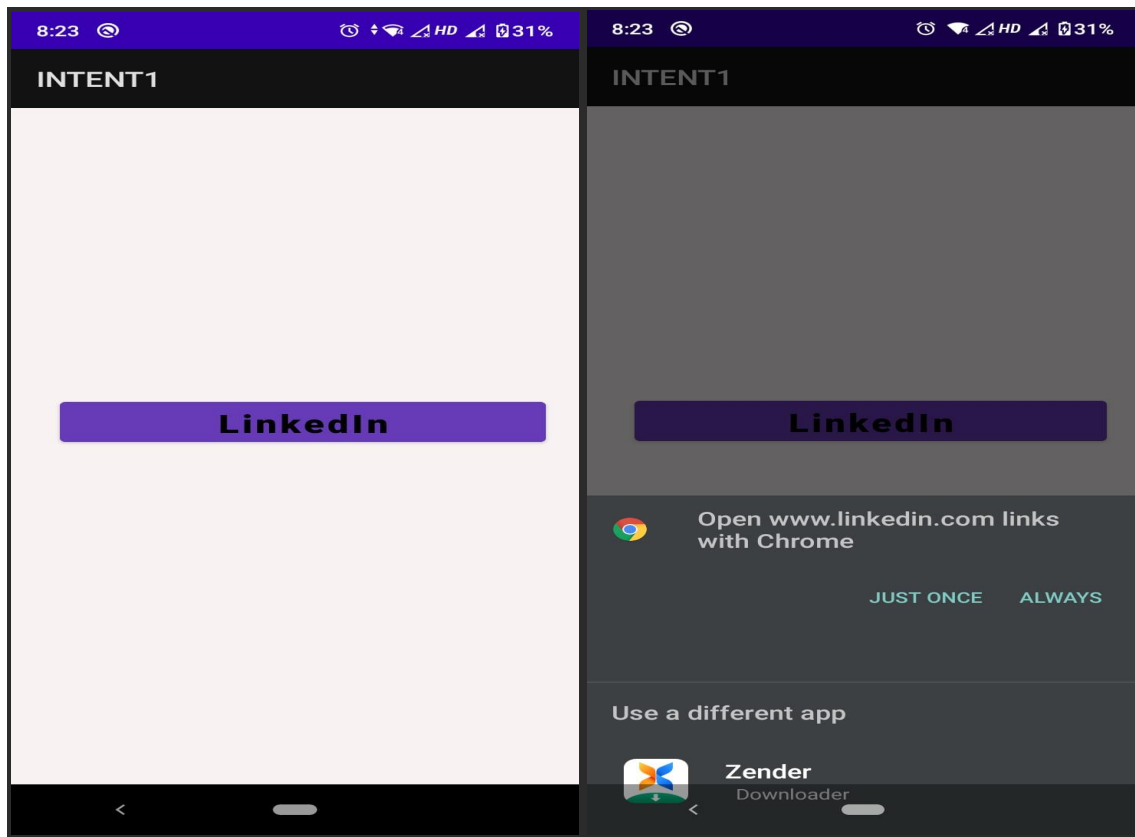
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.intent2">
    <uses-permission android:name="android.permission.INTERNET"></uses-permission>

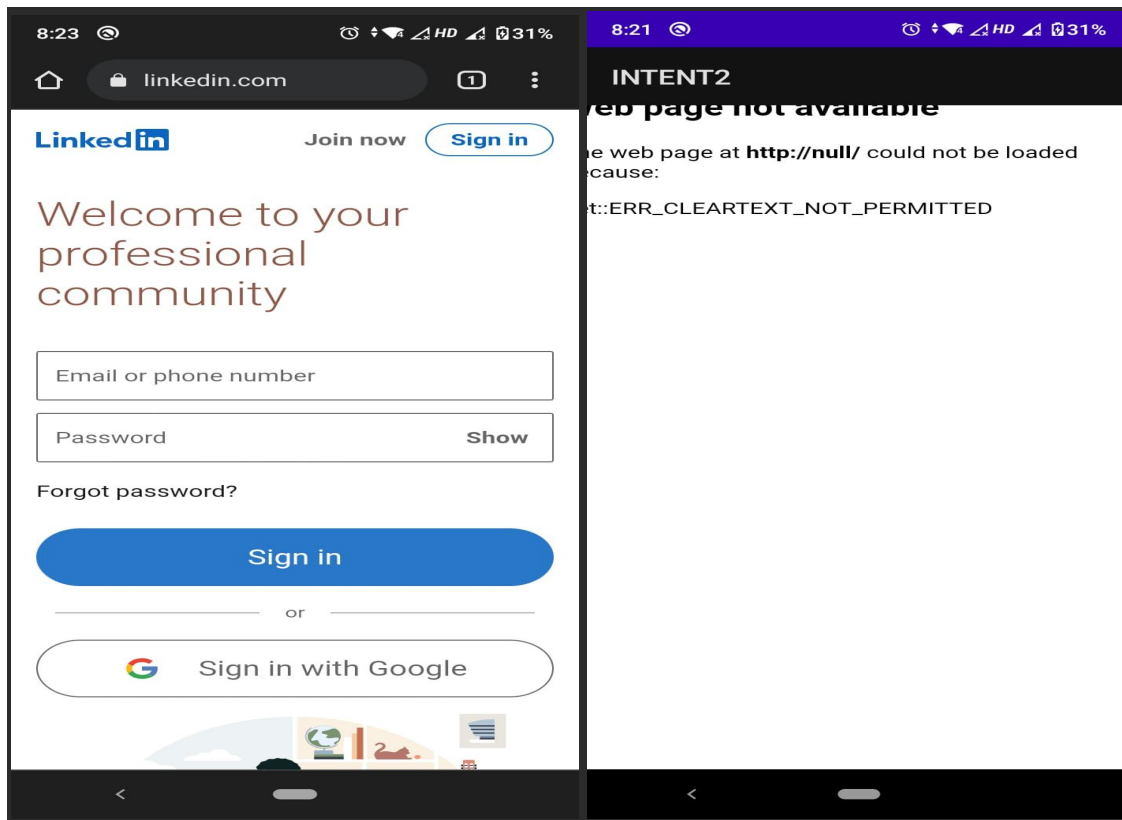
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.INTENT2">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter tools:ignore="AppLinkUrlError">
                <action android:name="android.intent.action.VIEW" />

                <category android:name="android.intent.category.DEFAULT" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```


OUTPUT:





RESULT:

The program executed successfully and obtained the output.

PROGRAM - 11

AIM:

Develop an application that works with explicit intent.

PROGRAM CODE:

JAVA CODE:

MainActivity.java

```
package com.example.co3_q3explicitintent;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

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.address);

        String add = editText2.getText().toString();
```

```

        final EditText editText3 = (EditText)findViewById(R.id.email);

        String em = editText3.getText().toString();

        i.putExtra("Value1", msg);

        i.putExtra("Value2", add);

        i.putExtra("Value3", em);

        startActivity(i);

    }

}

```

MainActivity2.java

```

package com.example.co3_q3explicitintent;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

    TextView view1;

    TextView view2;

    TextView view3;

    @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);

        Bundle extras = getIntent().getExtras();

        String value1 = extras.getString("Value1");

        String value2 = extras.getString("Value2");

        String value3 = extras.getString("Value3");

        view1.setText(value1);

        view2.setText(value2);

        view3.setText(value3);

    }

}

```

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: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/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="0.313" />

<EditText

android:id="@+id/email"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:ems="10"

android:hint="Email"

android:inputType="textPersonName"

android:onClick="callActivity"

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="0.475" />

<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: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"

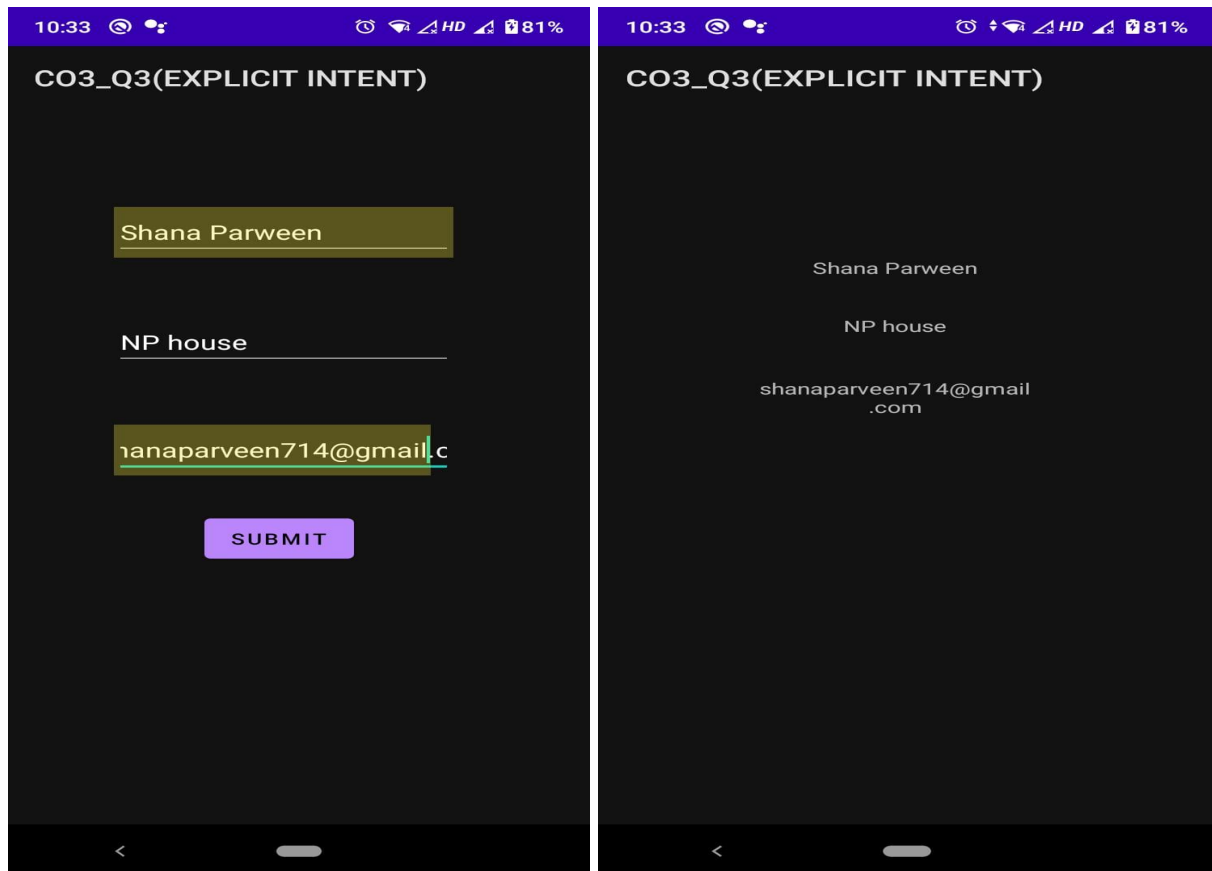
app:layout_constraintHorizontal_bias="0.459"
```



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

OUTPUT:



RESULT:

The program executed successfully and obtained the output.

PROGRAM - 12

AIM:

Implement Options Menu to navigate to activities.

PROGRAM CODE:

JAVA CODE:

- **Main Activity.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);
}
}

```

- **Share.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);
    }
}

```

- **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);
    }
}
```

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_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>
```

- **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>

```

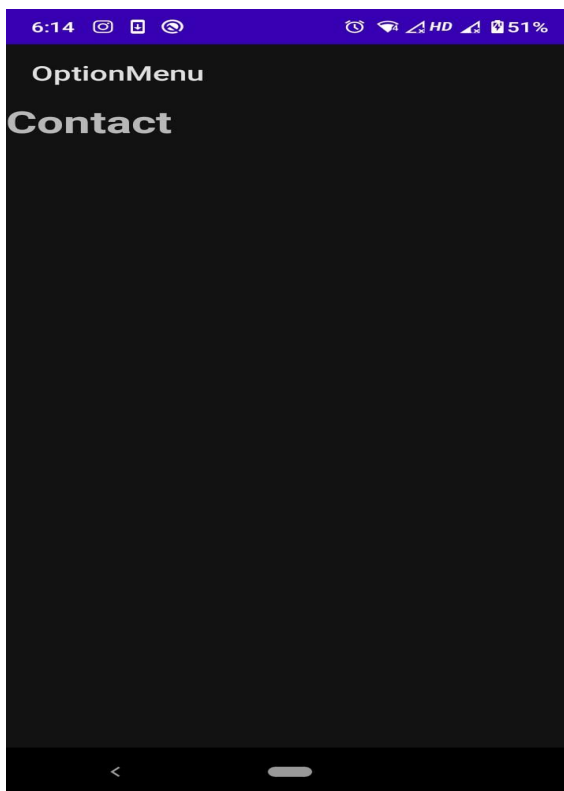
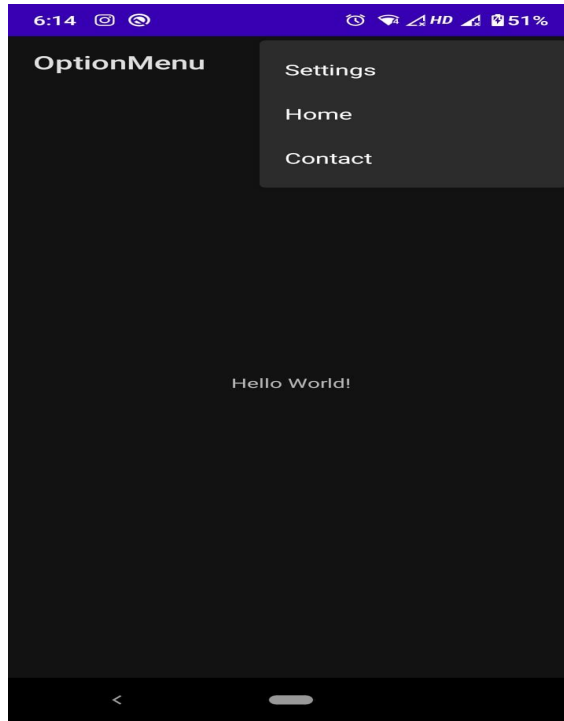
- **activity_settings.xml**

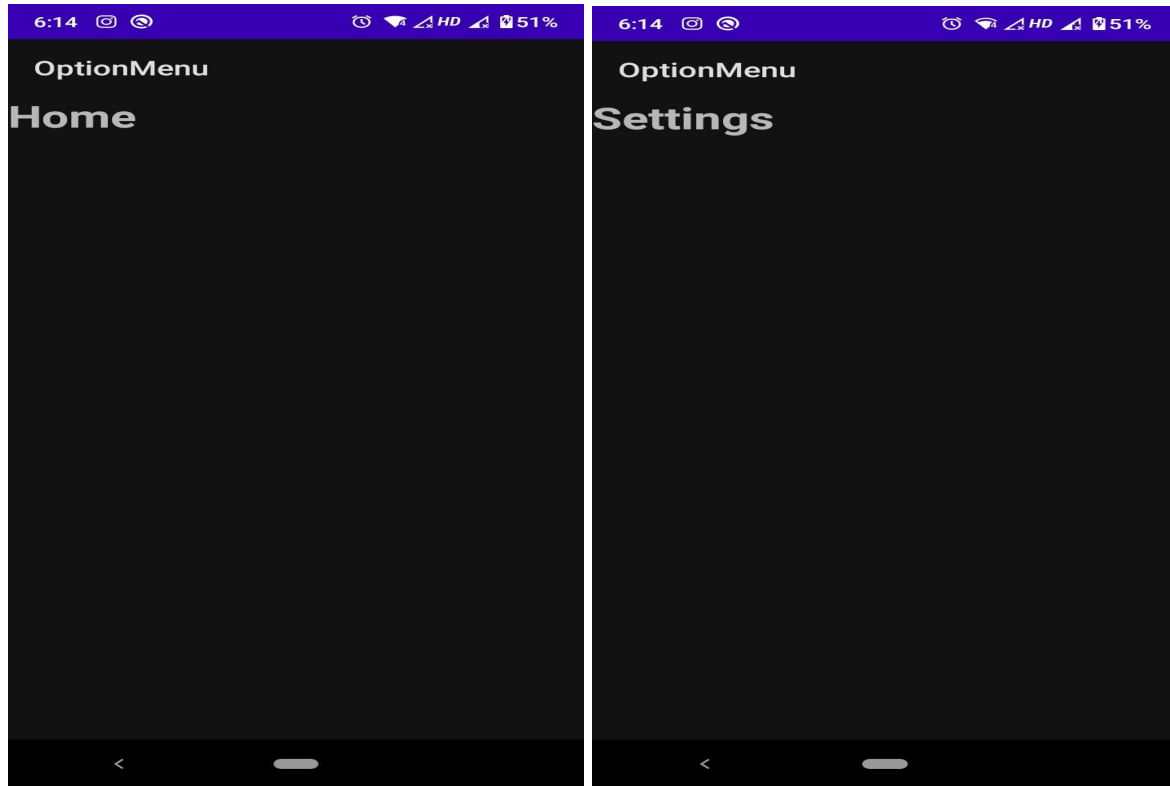
```

<?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>

```

OUTPUT:





RESULT:

The program executed successfully and obtained the output.

PROGRAM - 13

AIM:

Develop an application that uses ArrayAdapter with ListView.

PROGRAM CODE:

JAVA CODE:

```
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.ArrayAdapter;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {

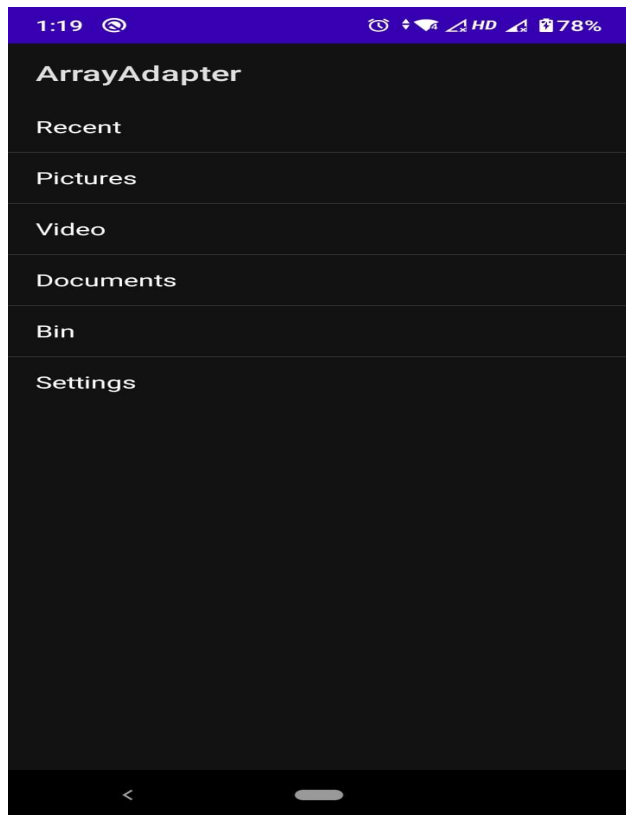
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ListView list=findViewById(R.id.listview);
        String[] item=new String[]{"Recent","Pictures","Video","Documents","Bin","Settings"};
        ArrayAdapter<String> myAdapter=new ArrayAdapter<String>(MainActivity.this,
        android.R.layout.simple_list_item_1,item);
        list.setAdapter(myAdapter);
        list.setOnItemClickListener(new AdapterView.OnItemClickListener() {

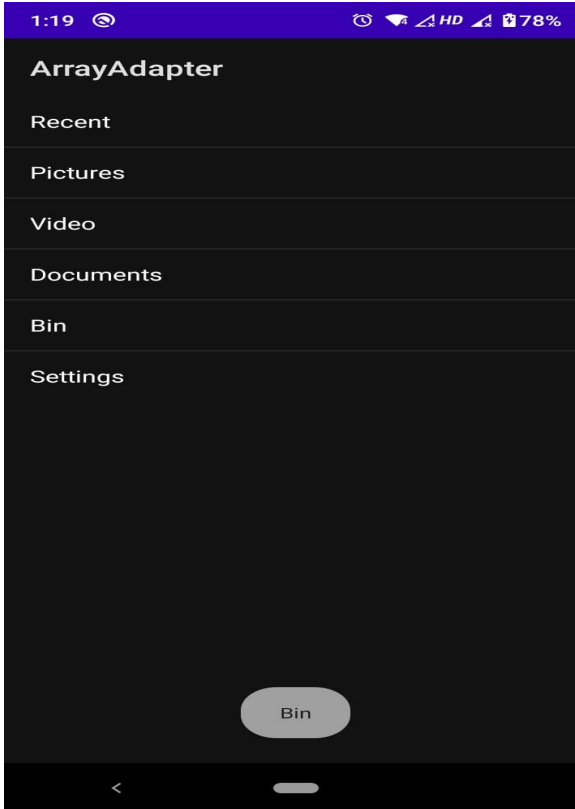
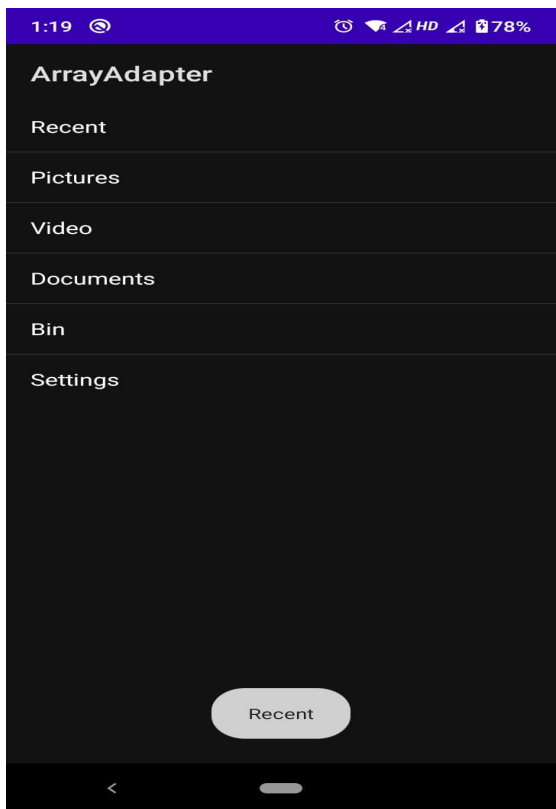
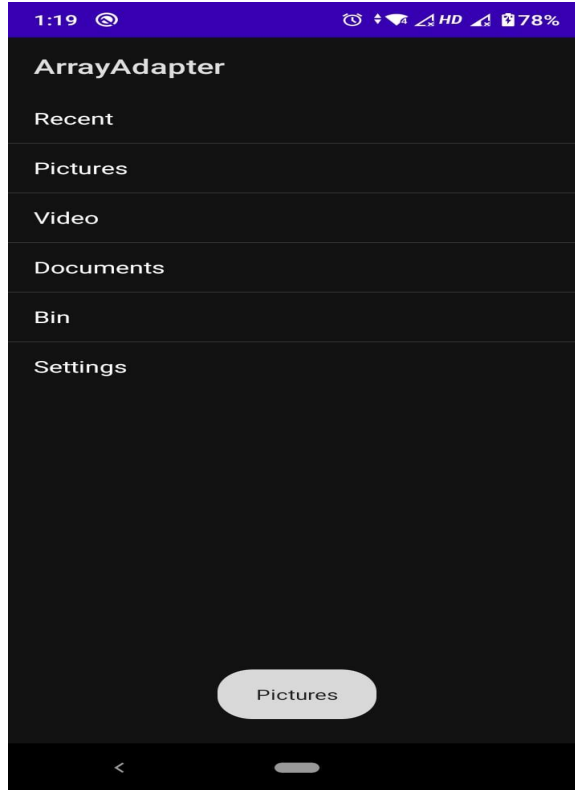
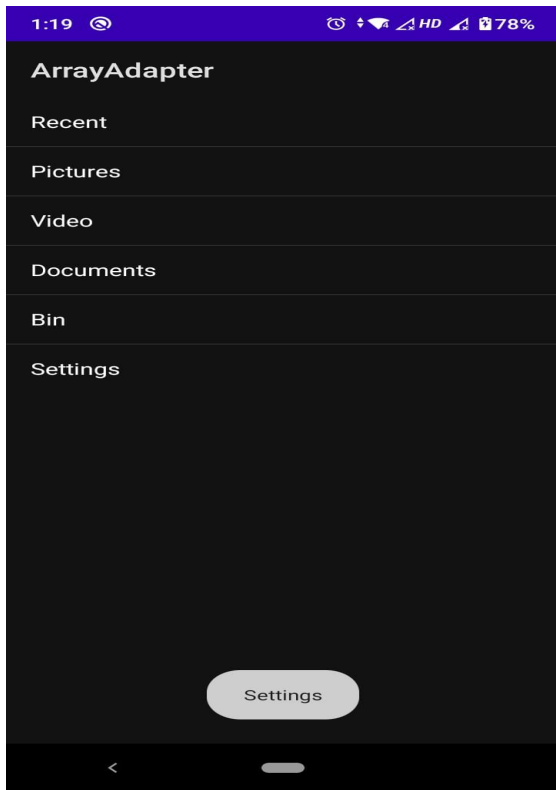
            @Override
            public void onItemClick(AdapterView<?> parent,View view,int position,long id) {
                String item_name=item[position];
                Toast.makeText(MainActivity.this,item_name, Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

XML CODE:

```
<?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>
```

OUTPUT:





RESULT:

The program executed successfully and obtained the output.