Date: 03/03/2022
Lab Session No.: 03
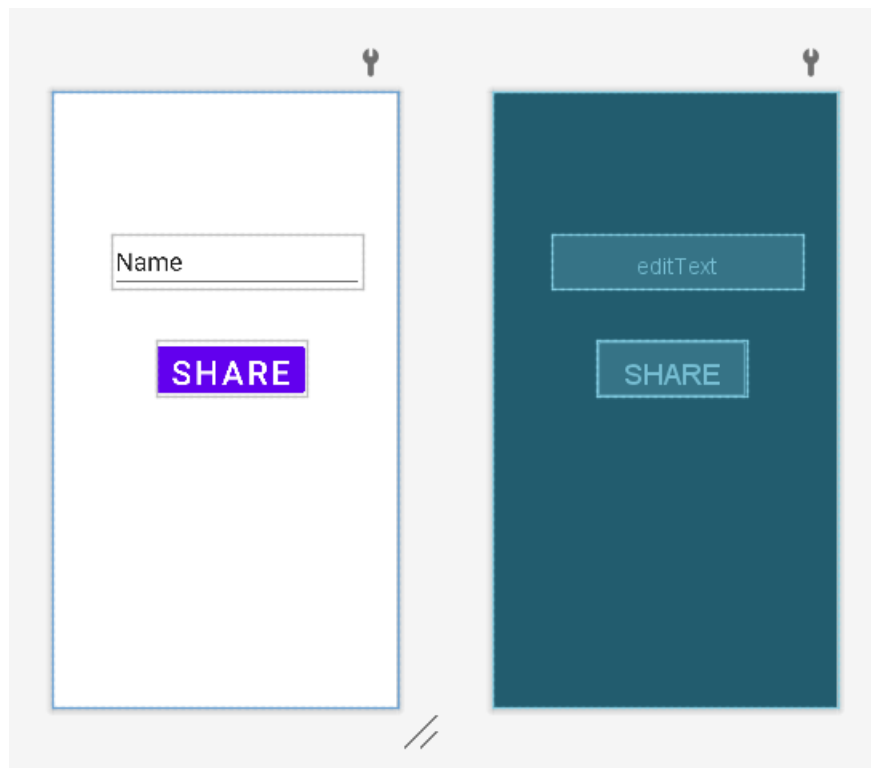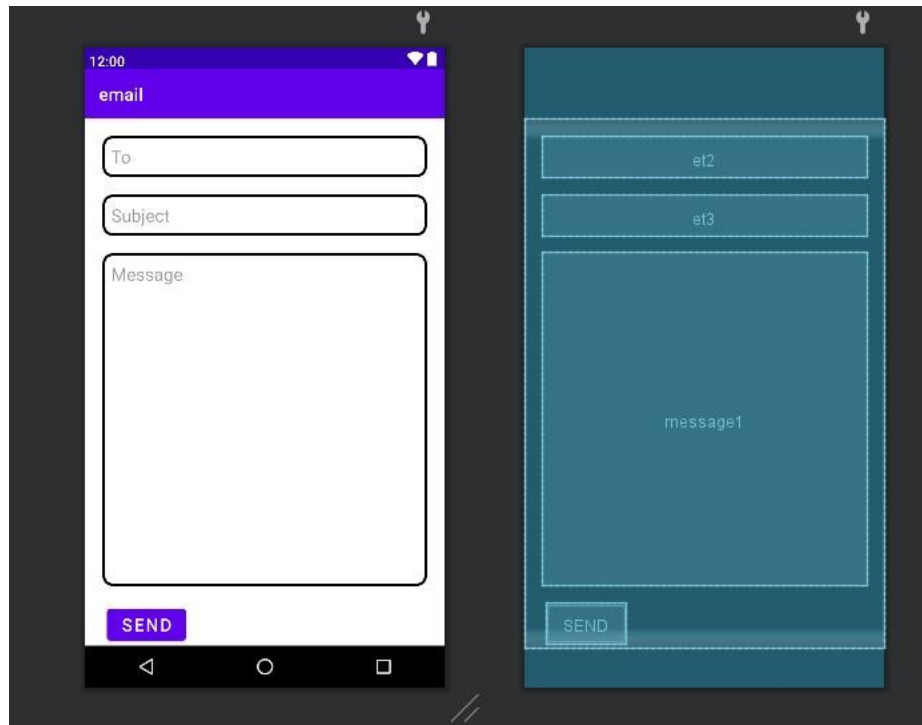
Aim:

a)Develop an android application to demonstrate the Implicit and Explicit Intent.

b)Develop a mobile application that shares the message through an email.

Software's /IDE Tools:
Android Development Kit / Android Studio

Application User interface design:

Application Programming Interface:

API / PACKAGES	CLASSES / INTERFACES	METHODS	DESCRIPTION
import androidx.appcompat.app.AppCompatActivity;	AppCompatActivity	protected void onCreate(Bundle savedInstanceState)	onCreate(Bundle) is where you initialize your activity. When Activity is started and application is not loaded, then both onCreate() methods will be called.
import android.widget.EditText;	EditText	getText()	Determines the minimum type that getText() will return. If set, specifies that this TextView has a textual input method and should automatically capitalize what the user types.

Code/Implementation:
// Develop an android application to demonstrate the Implicit and Explicit Intent.
// Project Name : ShareMyApp
/*

Lab Session No.	: 03
Author	: Tellakula Avinash
Date	: 03/03/2022
Roll Number	: 198W1A05C0
Description	: Implementation of Intents
Softwares required	: Android Studio
Topics Covered	: Implicit Intents and Explicit Intents

*/

a)MainAcitivity.java

```java
package com.avinash.myshareapp;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.Button;
import android.content.Intent;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener {

    Button b;
    EditText e;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b=(Button)findViewById(R.id.button);
        e=(EditText)findViewById(R.id.editText);
        b.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {
        if(v.getId()==R.id.button) {
        String result=e.getText().toString();
        Intent shareIntent=new Intent();
        shareIntent.setAction(Intent.ACTION_SEND);
        shareIntent.putExtra(Intent.EXTRA_TEXT,result);
        shareIntent.setType("text/plain");
        startActivity(shareIntent.createChooser(shareIntent,"Share to"));
        }

    }
}
```

activity_main.xml

```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">

    <EditText
        android:id="@+id/editText"
        android:layout_width="297dp"
        android:layout_height="65dp"
        android:layout_marginStart="72dp"
        android:layout_marginTop="168dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:text="Name"
        android:textSize="30sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button"
        android:layout_width="178dp"
        android:layout_height="67dp"
        android:layout_marginStart="124dp"
        android:layout_marginTop="296dp"
        android:text="Share"
        android:textSize="40sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

b)MainAcitivity.java

```java
package com.avinash.email;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {
    EditText mEditText,mEditTextMessage,mEditTextSubject;
    Button send;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```java
        setContentView(R.layout.activity_main);
        mEditText=(EditText)findViewById(R.id.et2);
        mEditTextMessage=(EditText)findViewById(R.id.et3);
        mEditTextSubject=(EditText)findViewById(R.id.message1);
        send=findViewById(R.id.bt_send);
        send.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                sendMail();
            }
        });
    }
    private void sendMail(){
        String getRecep=mEditText.getText().toString();
        String[] getReceplist=getRecep.split(",");
        String getsub=mEditTextSubject.getText().toString();
        String getmsg=mEditTextMessage.getText().toString();
        Intent intent=new Intent(Intent.ACTION_SEND);
        intent.putExtra(intent.EXTRA_EMAIL,getReceplist);
        intent.putExtra(intent.EXTRA_SUBJECT,getsub);
        intent.putExtra(intent.EXTRA_TEXT,getmsg);
        intent.setType("message/rfc822");
        startActivity(intent.createChooser(intent,"Choose the appropriate channel"));
    }
}
```

activity_main.xml

```xml
<?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"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
    <EditText
        android:layout_width="match_parent"
        android:textSize="20dp"
        android:id="@+id/et2"
        android:layout_margin="20dp"
        android:padding="10dp"
```

```xml
        android:layout_height="wrap_content"
        android:hint="To"
        android:textColor="@color/black"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        android:background="@drawable/edit_text_background1"
        app:layout_constraintTop_toTopOf="parent" />
    <EditText
        android:layout_width="match_parent"
        android:textSize="20dp"
        android:layout_marginLeft="20dp"
        android:layout_marginRight="20dp"
        android:padding="10dp"
        android:textColor="@color/black"
        android:id="@+id/et3"
        android:layout_height="wrap_content"
        android:hint="Subject"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        android:background="@drawable/edit_text_background1"
         />
    <EditText
        android:layout_width="match_parent"
        android:textSize="20dp"
        android:id="@+id/message1"
        android:gravity="top"
        android:textColor="@color/black"
        android:layout_margin="20dp"
        android:padding="10dp"
        android:layout_height="380dp"
        android:hint="Message"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        android:background="@drawable/edit_text_background1"
         />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/bt_send"
```
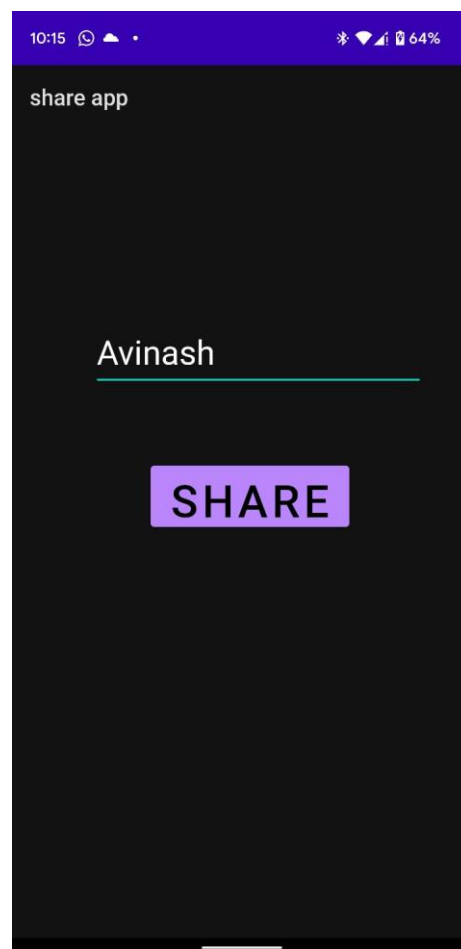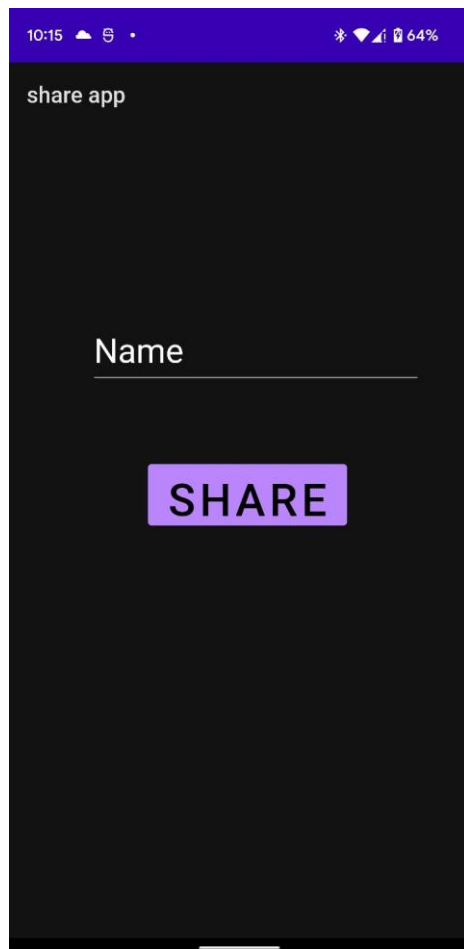
```
        android:layout_marginLeft="25dp"
        android:text="Send"
        android:textSize="20dp"
        android:textColor="@color/white"/>
    </LinearLayout>
</LinearLayout>
```
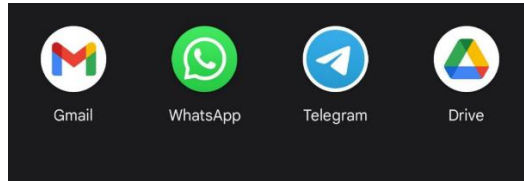
edit_text_background1.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle">

    <stroke android:width="3dp"
        android:color="@color/black"/>
    <corners android:radius="10dp"/>
    <solid android:color="@color/white"/>
</shape>
```
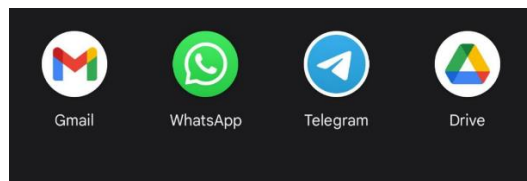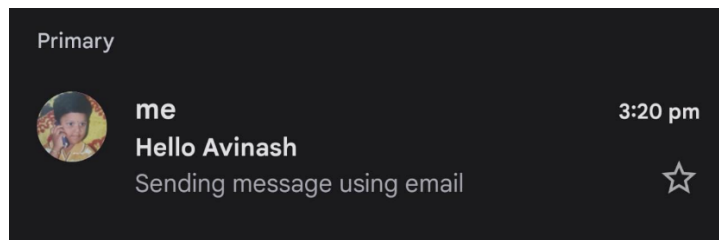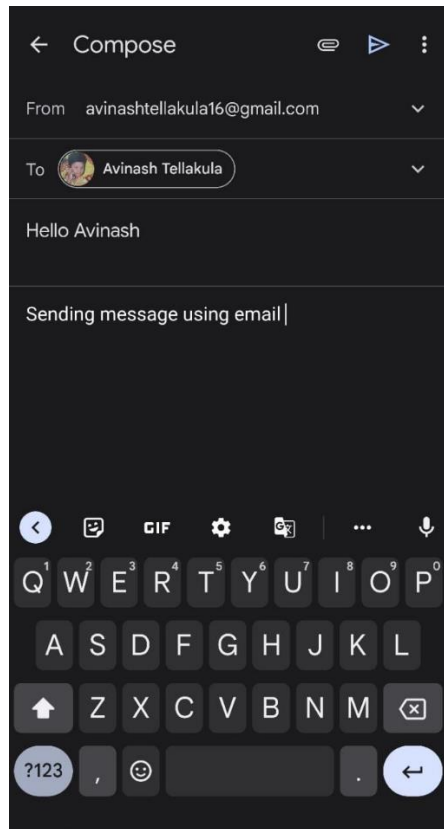
Output:

b)

Result:
Demonstration the Implicit and Explicit Intents were done successfully.