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**EX NO: 1(A)**

**DATE:**

## DEVELOP AN ANDROID APPLICATION TO FIND THE LARGEST AMONG THREE NUMBERS

**MainActivity.java**

```java
package com.example.myapplication;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private EditText mEditText1, mEditText2, mEditText3;

    private TextView mTextViewResult;

    private Button mButton;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        mEditText1 = findViewById(R.id.editText1);

        mEditText2 = findViewById(R.id.editText2);

        mEditText3 = findViewById(R.id.editText3);

        mTextViewResult = findViewById(R.id.textViewResult);

        mButton = findViewById(R.id.button);

        mButton.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                findLargestNumber();

            }

        });
```

```java
    }
    private void findLargestNumber() {
        String text1 = mEditText1.getText().toString();
        String text2 = mEditText2.getText().toString();
        String text3 = mEditText3.getText().toString();
        if (text1.isEmpty()) text1 = "0";
        if (text2.isEmpty()) text2 = "0";
        if (text3.isEmpty()) text3 = "0";
        int num1 = Integer.parseInt(text1);
        int num2 = Integer.parseInt(text2);
        int num3 = Integer.parseInt(text3);
        int largest = num3 > (num1 > num2 ? num1 : num2) ? num3 : (num1 > num2 ? num1 : num2);
        mTextViewResult.setText("Largest Number: " + largest);
    }
}
```

**Activity_main.xml**

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp">
    <EditText
        android:id="@+id/editText1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter number 1"
        android:inputType="number" />
    <EditText
        android:id="@+id/editText2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```xml
        android:hint="Enter number 2"

        android:inputType="number"

        android:layout_below="@id/editText1"

        android:layout_marginTop="16dp" />

    <EditText

        android:id="@+id/editText3"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter number 3"

        android:inputType="number"

        android:layout_below="@id/editText2"

        android:layout_marginTop="16dp" />

    <Button

        android:id="@+id/button"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Find Largest"

        android:layout_below="@id/editText3"

        android:layout_marginTop="16dp"

        android:layout_centerHorizontal="true" />

    <TextView

        android:id="@+id/textViewResult"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Largest Number: "

        android:layout_below="@id/button"

        android:layout_marginTop="16dp"

        android:layout_centerHorizontal="true"

        android:textSize="18sp" />

</RelativeLayout>
```

**OUTPUT**



Number 1:

10

Number 2:

20

Number 3:

30

**Find Largest**

Largest Number: 30

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**EX NO: 1(B)**

**DATE:**

## DEVELOP AN ANDROID APPLICATION TO FIND THE SMALLEST AMONG TWO NUMBERS

**MainActivity.java**

```java
package com.example.smallest;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private EditText mEditText1, mEditText2;

    private TextView mTextViewResult;

    private Button mButton;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        mEditText1 = findViewById(R.id.edittext_number_1);

        mEditText2 = findViewById(R.id.edittext_number_2);

        mTextViewResult = findViewById(R.id.textview_result);

        mButton = findViewById(R.id.button);

        mButton.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                findSmallestNumber();

            }

        });

    }
```

```java
    private void findSmallestNumber() {

        String text1 = mEditText1.getText().toString();

        String text2 = mEditText2.getText().toString();

        if (text1.isEmpty()) text1 = "0";

        if (text2.isEmpty()) text2 = "0";

        int num1 = Integer.parseInt(text1);

        int num2 = Integer.parseInt(text2);

        int smallest = (num1 < num2) ? num1 : num2;

        mTextViewResult.setText("Smallest Number: " + smallest);

    }

}
```

## Activity_main.xml

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:orientation="vertical"

    android:padding="16dp">

    <!-- TextView for Number 1 -->

    <TextView

        android:id="@+id/textView"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:text="Enter Number 1" />

    <!-- EditText for Number 1 -->

    <EditText

        android:id="@+id/edittext_number_1"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter the first number"

        android:inputType="number" />

    <!-- TextView for Number 2 -->
```
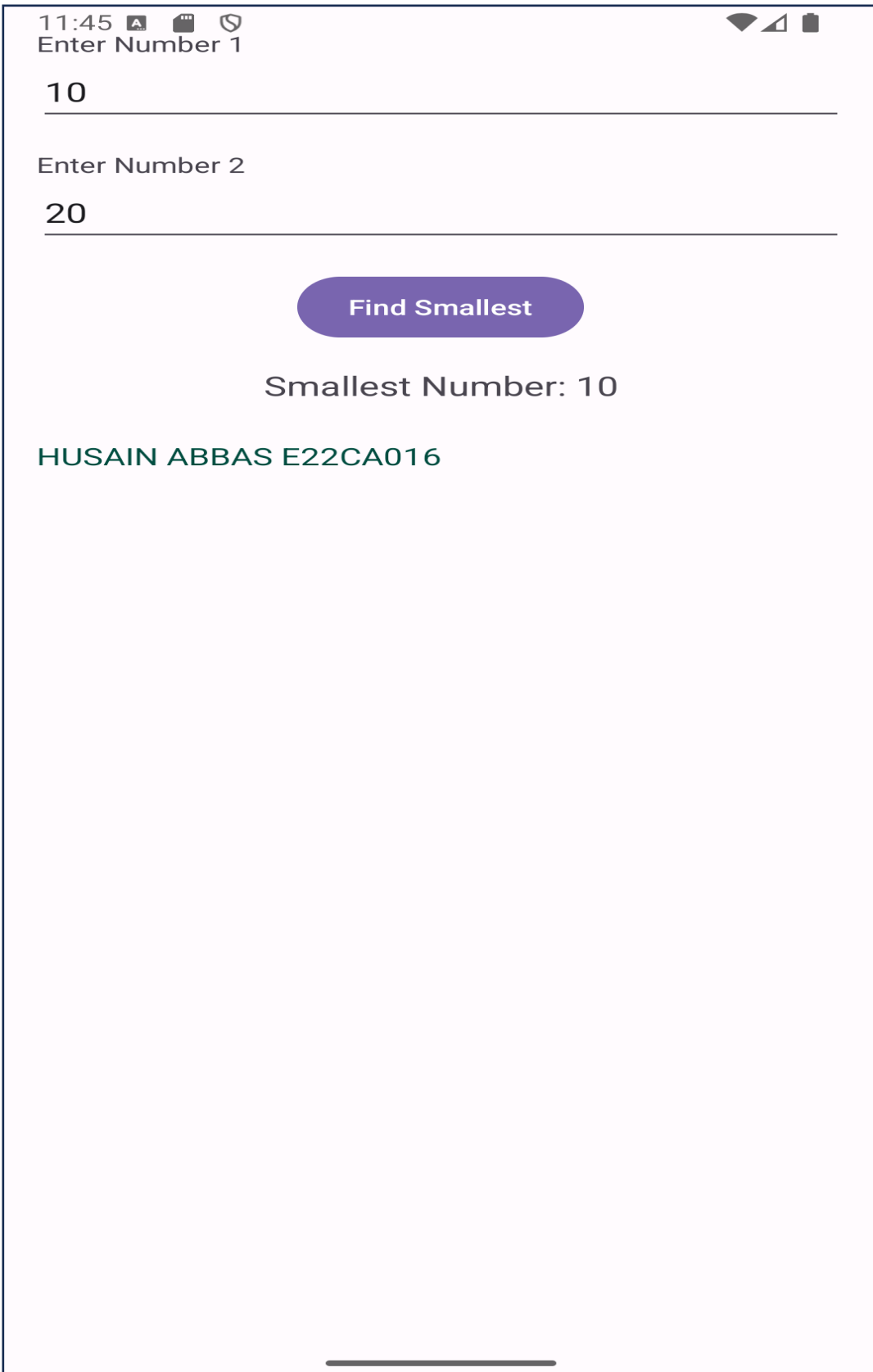
```xml
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Enter Number 2"
    android:layout_marginTop="16dp" />
<!-- EditText for Number 2 -->
<EditText
    android:id="@+id/edittext_number_2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter the second number"
    android:inputType="number" />
<!-- Button to find the smallest number -->
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Find Smallest"
    android:layout_marginTop="16dp"
    android:layout_gravity="center_horizontal" />
<!-- TextView to display the result -->
<TextView
    android:id="@+id/textview_result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Smallest Number: "
    android:layout_marginTop="16dp"
    android:layout_gravity="center_horizontal"
    android:textSize="18sp" />
</LinearLayout>
```

**OUTPUT**

**EX NO: 2**

**DATE:**

**DEVELOP AN ANDROID APPLICATION THAT USES GUI COMPONENTS FONTS AND COLORS**

**MainActivity.java**

```java
import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    int ch = 1;

    float font = 30;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        final TextView t = findViewById(R.id.textView);

        Button b1 = findViewById(R.id.button1);

        Button b2 = findViewById(R.id.button2);

        b1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                t.setTextSize(font);

                font += 5; // Increase font size by 5

                if (font > 50) { // Reset font size if it exceeds 50

                    font = 30;

                }

            }

        });
```

```java
b2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        switch (ch) {
            case 1:
                t.setTextColor(Color.RED);
                break;
            case 2:
                t.setTextColor(Color.GREEN);
                break;
            case 3:
                t.setTextColor(Color.BLUE);
                break;
            case 4:
                t.setTextColor(Color.CYAN);
                break;
            case 5:
                t.setTextColor(Color.YELLOW);
                break;
            case 6:
                t.setTextColor(Color.MAGENTA);
                break;
        }
        ch++;
        if (ch > 6) { // Reset color cycle
            ch = 1;
        }
    }
});
    }
}
```

**Activity_main.xml**

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    android:gravity="center">
    <!-- TextView to display text -->
    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello, Android!"
        android:textSize="30sp"
        android:textColor="#000000"
        android:layout_marginBottom="24dp" />
    <!-- Button to increase font size -->
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Increase Font Size"
        android:layout_marginBottom="16dp" />
    <!-- Button to change text color -->
    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Change Text Color" />
</LinearLayout>
```
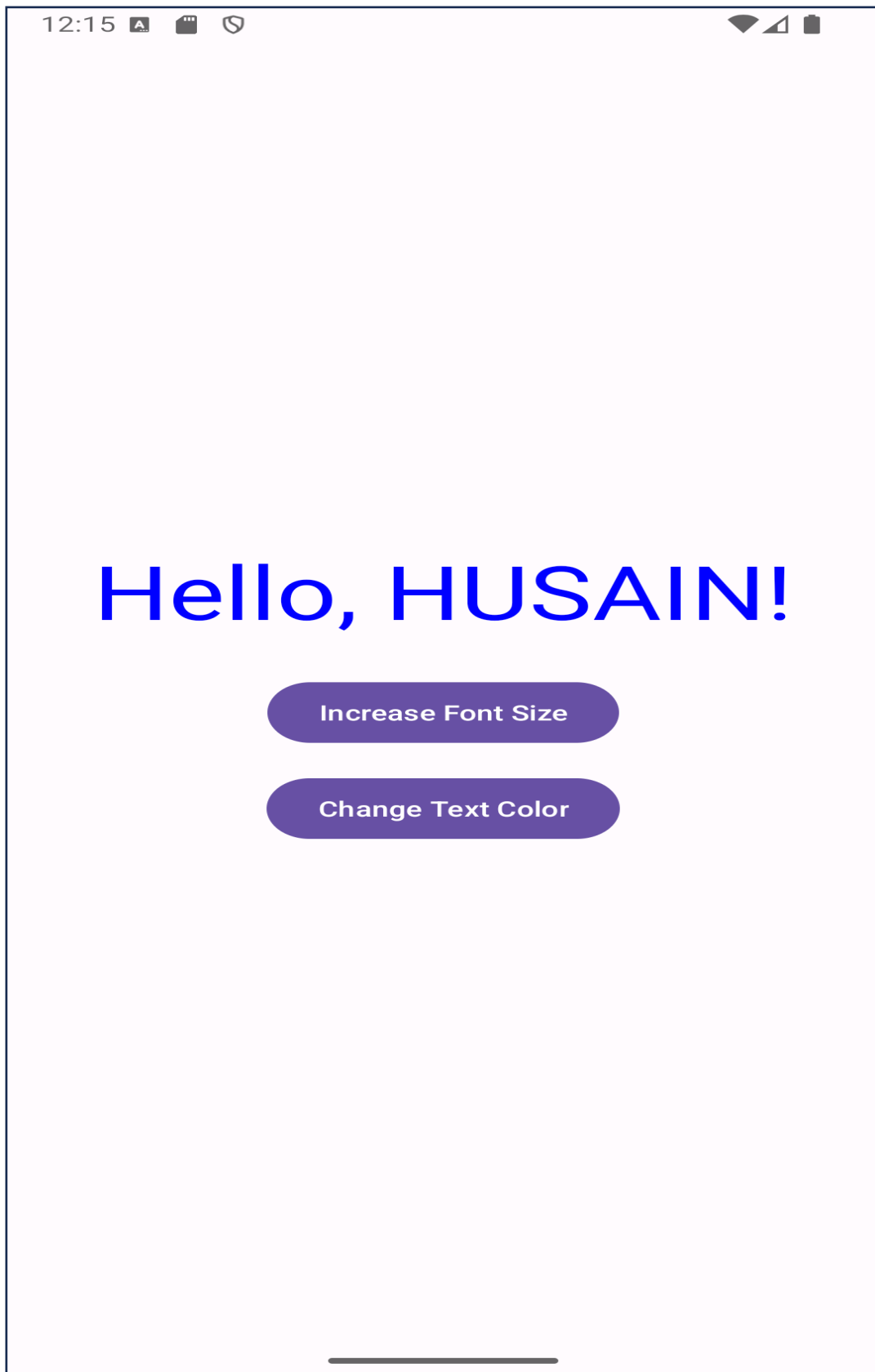
12:15

# Hello, HUSAIN!

Increase Font Size

Change Text Color

**EX NO: 3**

**DATE:**

## DEVELOP AN ANDROID APPLICATION TO DRAW BASIC GRAPHICAL PRIMITIVES

**MainActivity.java**

```java
package com.example.exno3;

import android.app.Activity;

import android.graphics.Bitmap;

import android.graphics.Canvas;

import android.graphics.Color;

import android.graphics.Paint;

import android.graphics.drawable.BitmapDrawable;

import android.os.Bundle;

import android.widget.ImageView;

public class MainActivity extends Activity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        Bitmap bg = Bitmap.createBitmap(720, 1280, Bitmap.Config.ARGB_8888);

        ImageView imageView = findViewById(R.id.imageView);

        imageView.setBackground(new BitmapDrawable(getResources(), bg));

        Canvas canvas = new Canvas(bg);

        Paint paint = new Paint();

        paint.setColor(Color.BLUE);

        paint.setTextSize(50);
```

```java
        canvas.drawText("Rectangle", 420, 150, paint);

        canvas.drawRect(400, 200, 650, 700, paint);

        canvas.drawText("Circle", 120, 150, paint);

        canvas.drawCircle(200, 350, 150, paint);

        canvas.drawText("Square", 120, 800, paint);

        canvas.drawRect(50, 850, 350, 1150, paint);

        canvas.drawText("Line", 480, 800, paint);

        canvas.drawLine(520, 850, 520, 1150, paint);

    }

}
```

## Activity_main.xml

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent">


    <!-- ImageView to display the drawing -->

    <ImageView

        android:id="@+id/imageView"

        android:layout_width="match_parent"

        android:layout_height="match_parent" />

</RelativeLayout>
```
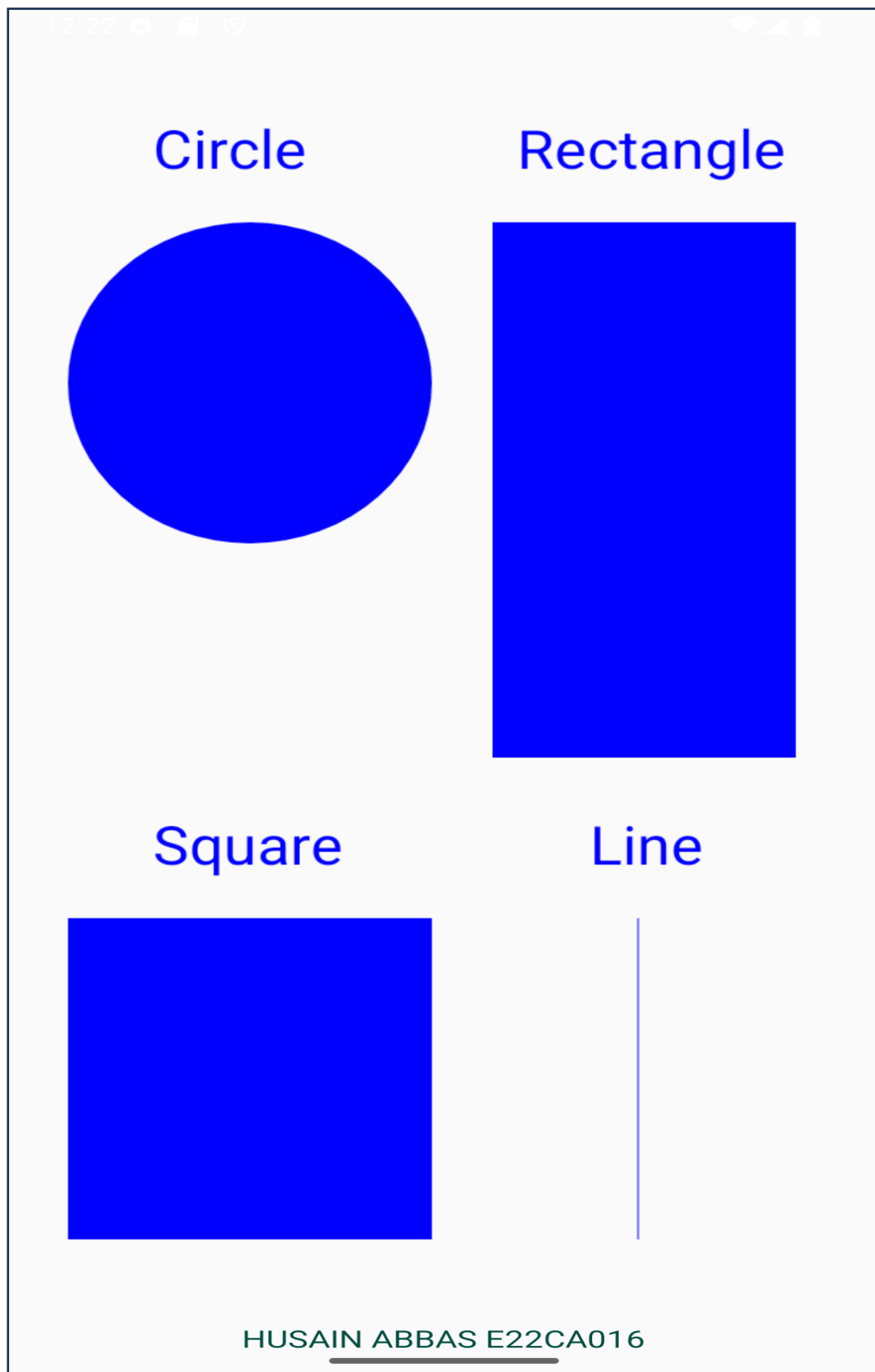
**OUTPUT**

**EX NO: 4**

**DATE:**

**DEVELOP AN ANDROID APPLICATION TO DISPLAY BASIC INFORMATION**

**MainActivity.java**

```
package com.example.basicdetails;

import android.app.Activity;

import android.os.Bundle;

import android.text.method.ScrollingMovementMethod;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends Activity {

    private Button b;

    private EditText sname, squal, snumber;

    private TextView tv;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        b = findViewById(R.id.click);

        tv = findViewById(R.id.display);

        sname = findViewById(R.id.name);

        squal = findViewById(R.id.qual);

        snumber = findViewById(R.id.mobileno);

        tv.setMovementMethod(new ScrollingMovementMethod());

        b.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                String name = sname.getText().toString();

                String qual = squal.getText().toString();

                String number = snumber.getText().toString();
```

```
            tv.setText("Your Details:\n\nName: " + name + "\nQualification: " + qual + "\nContact
Number: " + number + "\n");
        }
    });
  }
}
```

## Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center_horizontal"
    android:orientation="vertical"
    android:padding="16dp">
    <!-- Title -->
    <TextView
        android:id="@+id/title"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:layout_marginBottom="20dp"
        android:text="Enter Your Details"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:textStyle="bold" />
    <!-- EditText for Name -->
    <EditText
        android:id="@+id/name"
        android:layout_width="300dp"
        android:layout_height="wrap_content"
        android:hint="Your Name"
        android:inputType="textPersonName"
        android:ems="10">
```

```xml
        <requestFocus />

    </EditText>

    <!-- EditText for Qualification -->

    <EditText

        android:id="@+id/qual"

        android:layout_width="300dp"

        android:layout_height="wrap_content"

        android:layout_marginTop="16dp"

        android:hint="Your Qualification"

        android:inputType="text" />

    <!-- EditText for Mobile Number -->

    <EditText

        android:id="@+id/mobileno"

        android:layout_width="300dp"

        android:layout_height="wrap_content"

        android:layout_marginTop="16dp"

        android:hint="Your Contact Number"

        android:inputType="phone" />

    <!-- Button to Display Details -->

    <TextView

        android:id="@+id/display"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:layout_marginTop="24dp"

        android:scrollbars="vertical"

        android:text="Your Details will be displayed here..."

        android:textSize="16sp" />

</LinearLayout>
```

12:27

# Enter Your Details

HUSAIN ABBAS

BCA

123456789

DISPLAY DETAILS

Your Details:

Name: HUSAIN ABBAS
Qualification: BCA
Contact Number: 123456789

**EX NO: 5**

**DATE:**

## DEVELOP AN ANDROID APPLICATION OF RADIO BUTTON

**MainActivity.java**

```java
package com.example.radio;

import android.os.Bundle;

import android.view.View;

import android.widget.RadioButton;

import android.widget.RadioGroup;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private RadioGroup radioGroup;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        radioGroup = findViewById(R.id.radioGroup);

    }

    public void onclickbuttonMethod(View v) {

        int selectedId = radioGroup.getCheckedRadioButtonId();

        if (selectedId == -1) { // Check if no radio button is selected

            Toast.makeText(MainActivity.this, "Nothing selected", Toast.LENGTH_SHORT).show();

        } else {

            // Find the selected RadioButton

            RadioButton selectedRadioButton = findViewById(selectedId);

            Toast.makeText(MainActivity.this, "Selected: " + selectedRadioButton.getText(),
Toast.LENGTH_SHORT).show();

        }

    }

}
```

## Activity_main.xml

```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"
    android:orientation="vertical"
    android:padding="16dp"
    <RadioGroup
        android:id="@+id/radioGroup"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="vertical">
        <!-- RadioButton 1 -->
        <RadioButton
            android:id="@+id/radio1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Computer Science"
            android:layout_marginTop="10dp"
            android:textSize="20sp" />
    <!-- Submit Button -->
    <Button
        android:id="@+id/submitButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:onClick="onclickbuttonMethod"
        android:text="Submit" />
</LinearLayout>
```

**EX NO: 6**

**DATE:**

### DEVELOP AN ANDROID APPLICATION THAT USING IMAGE BUTTON

**MainActivity.java**

```java
package com.example.imagebutton;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.widget.ImageButton;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

  private ImageButton pcasImageButton;

 @Override

 protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);

    pcasImageButton = findViewById(R.id.imageButton);

    pcasImageButton.setOnClickListener(view -> {

      Toast.makeText(MainActivity.this, "Welcome to Patrician College",
Toast.LENGTH_SHORT).show();

      String url = "https://patriciancollege.ac.in";

      Intent intent = new Intent(Intent.ACTION_VIEW);

      intent.setData(Uri.parse(url));

      startActivity(intent);

    });

  }

}
```

## Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp"
    android:gravity="center">

    <!-- ImageButton to open the college website -->
    <ImageButton
        android:id="@+id/imageButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@android:drawable/ic_dialog_info" <!-- Default Android icon -->
        android:contentDescription="Patrician College"
        android:background="?attr/selectableItemBackgroundBorderless"
        android:padding="16dp" />
</RelativeLayout>
```

**OUTPUT**



12:56

Welcome to Patrician College

HUSAIN ABBAS E22CA016
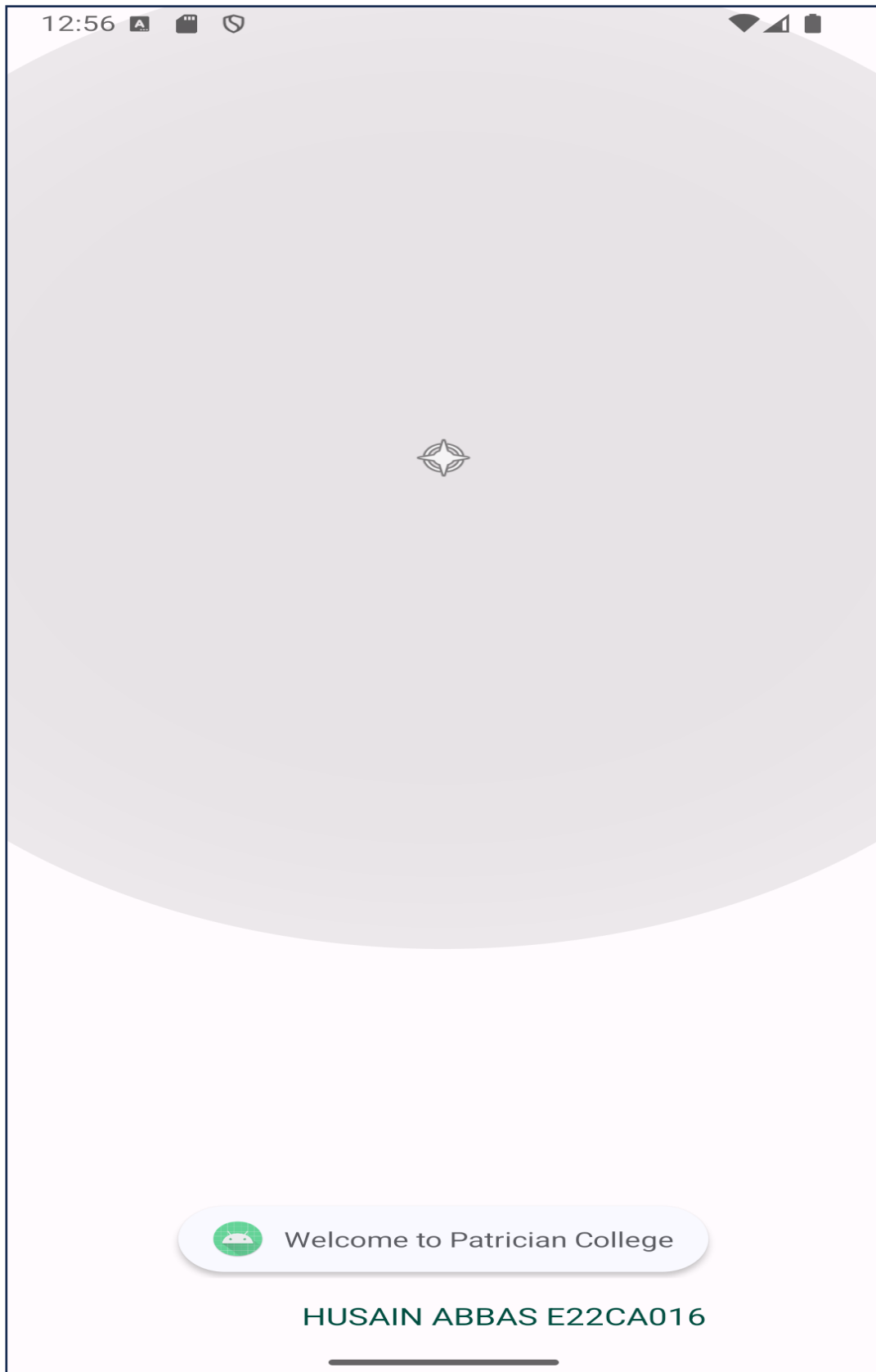
**EX NO: 7**

**DATE:**

## DEVELOP AN ANDROID APPLICATION FOR ALERT DIALOG BOX

**MainActivity.java**

```java
package com.example.alert;

import android.content.DialogInterface;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private Button closeButton;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        closeButton = findViewById(R.id.button);

        closeButton.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this);

                builder.setTitle("AlertDialogExample")

                    .setMessage("Do you want to close this application?")

                    .setCancelable(false) // Prevent dismissing the dialog by tapping outside

                    .setPositiveButton("Yes", new DialogInterface.OnClickListener() {

                        @Override

                        public void onClick(DialogInterface dialog, int id) {

                            finish();

                            Toast.makeText(getApplicationContext(), "You chose YES action for the alert box", Toast.LENGTH_SHORT).show();

                        }
```

```
                })

                .setNegativeButton("No", new DialogInterface.OnClickListener() {

                    @Override

                    public void onClick(DialogInterface dialog, int id) {

                        dialog.cancel();

                        Toast.makeText(getApplicationContext(), "You chose NO action for the alert box",
Toast.LENGTH_SHORT).show();

                    }

                });

        AlertDialog alert = builder.create();

        alert.show();

    }

    });

}
```

## Activity_main.xml

```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"

    android:padding="16dp"

    tools:context=".MainActivity"

    <!-- Button to trigger the AlertDialog -->

    <Butt

        android:id="@+id/button"

        android:layoutwidth="wrap_content"

        android:layout_height="wrap_content"

        android:text="Close Application"

        android:layout_centerInParent="true" />

</RelativeLayout>
```

**OUTPUT**
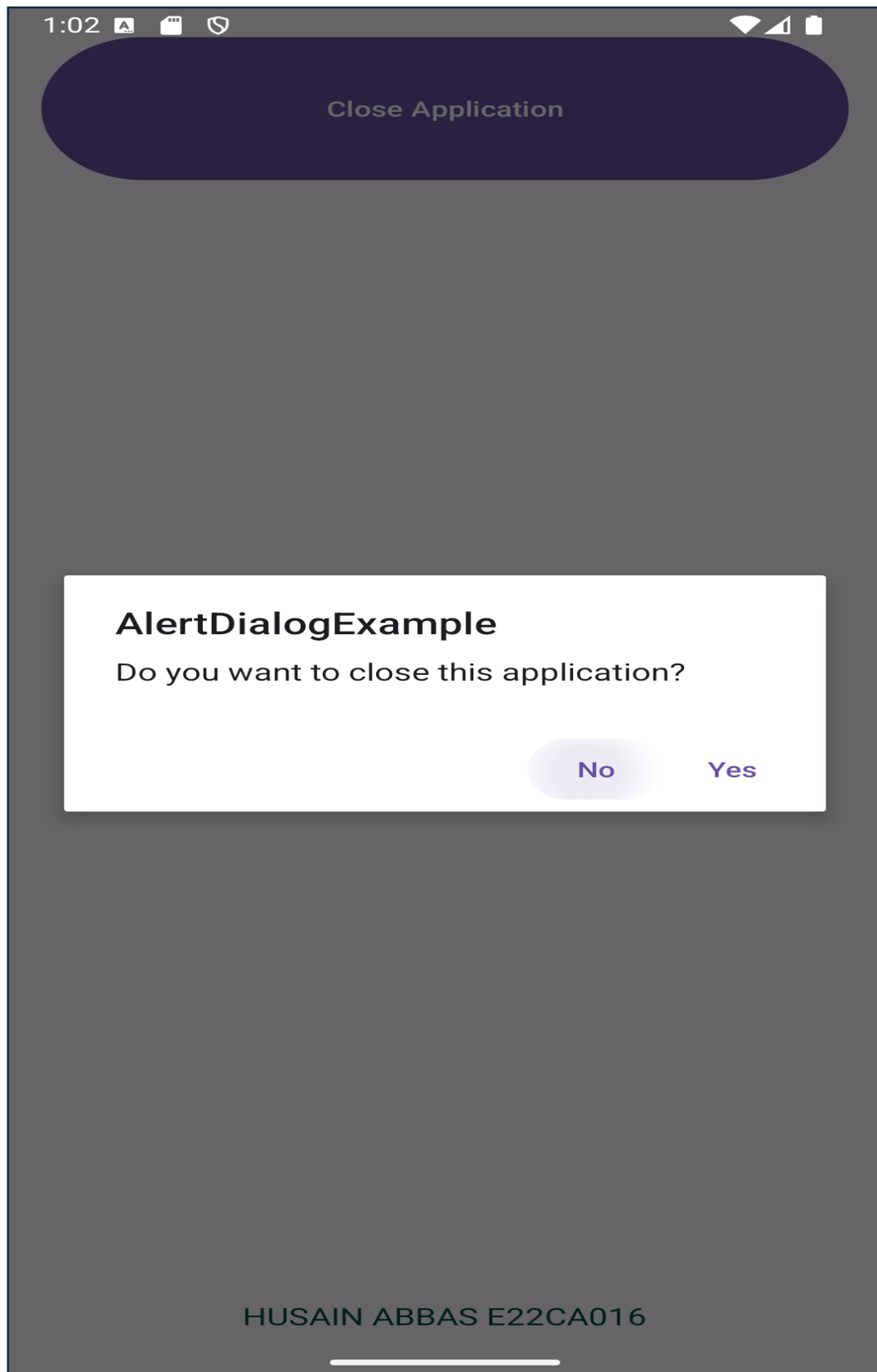
**EX NO: 8**

**DATE:**

## DEVELOP AN ANDROID APPLICATION THAT USING LAYOUT MANAGER

**MainActivity.java**

```
package com.example.layoutmanager;

import android.app.Activity;

import android.os.Bundle;

public class MainActivity extends Activity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }

}
```

**Activity_main.xml**

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:paddingLeft="16dp"

    android:paddingRight="16dp">

    <!-- EditText at the top -->

    <EditText

        android:id="@+id/name"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter your reminder" />

    <!-- LinearLayout below the EditText -->

    <LinearLayout

        android:layout_width="match_parent"
```

```xml
    android:layout_height="wrap_content"

    android:orientation="vertical"

    android:layout_below="@id/name"

    android:layout_marginTop="16dp">


    <!-- Button 1 -->
    <Button

        android:id="@+id/button1"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:text="Button 1" />


    <!-- Button 2 -->
    <Button

        android:id="@+id/button2"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:text="Button 2"

        android:layout_marginTop="16dp" />


    <!-- Button 3 -->
    <Button

        android:id="@+id/button3"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:text="Button 3"

        android:layout_marginTop="16dp" />
</LinearLayout>
</RelativeLayout>
```
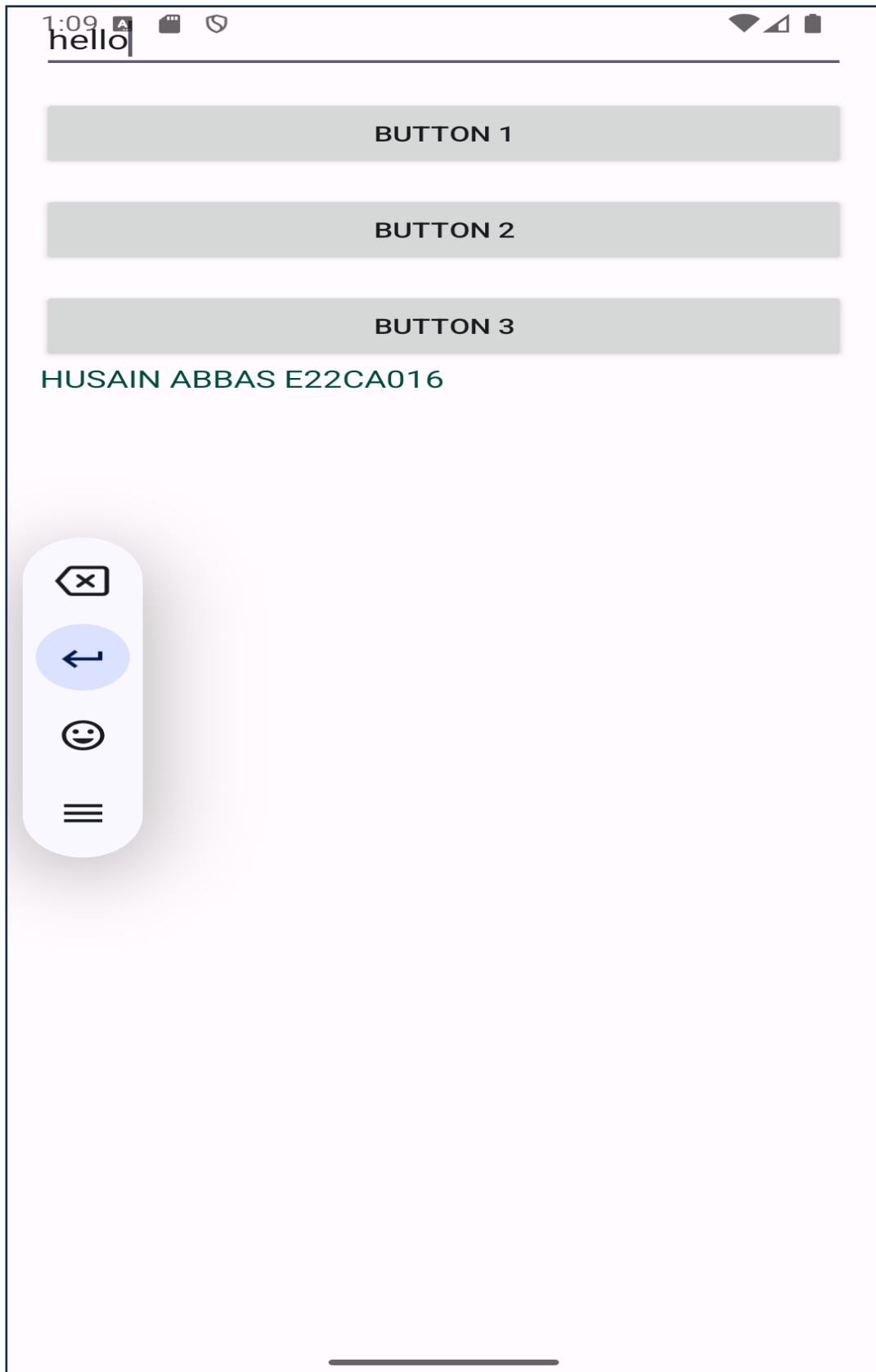
**EX NO: 9(A)**

**DATE:**

### DEVELOP AN ANDROID APPLICATION THAT USES LINEAR LAYOUT - VERTICAL

**MainActivity.java**

```java
package com.example.linearlayout;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }
```

**Activity_main.xml**

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:orientation="vertical"

    android:padding="16dp">

    <!-- TextView 1 -->

    <TextView

        android:id="@+id/textview1"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:background="#FFEB3B"

        android:text="LinearLayout - Vertical"

        android:textAlignment="center"

        android:textAllCaps="true"

        android:textSize="18sp"

        android:layout_marginBottom="16dp" />
```

```xml
    <!-- TextView 2 -->
    <TextView
        android:id="@+id/textview2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#4CAF50"
        android:text="This is a vertical layout example."
        android:textAlignment="center"
        android:textSize="16sp"
        android:layout_marginBottom="16dp" />
    <!-- Button 1 -->
    <Button
        android:id="@+id/button1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Button 1"
        android:layout_marginBottom="16dp" />
    <!-- Button 2 -->
    <Button
        android:id="@+id/button2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Button 2"
        android:layout_marginBottom="16dp" />
    <!-- Button 3 -->
    <Button
        android:id="@+id/button3"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Button 3" />
</LinearLayout>
```
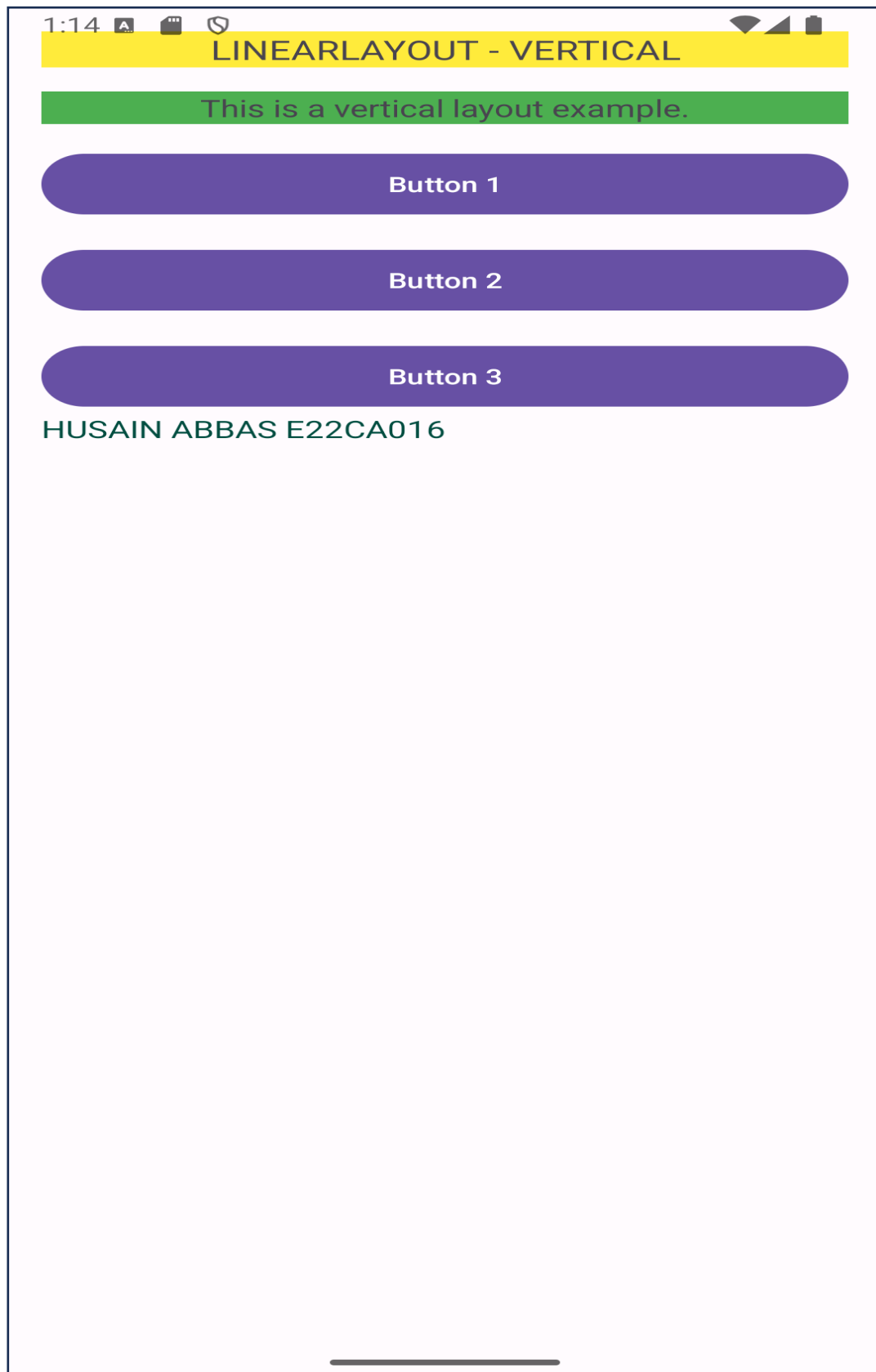
**OUTPUT**



1:14

LINEARLAYOUT - VERTICAL

This is a vertical layout example.

Button 1

Button 2

Button 3

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**EX NO: 9(B)**

**DATE:**

## DEVELOP AN ANDROID APPLICATION THAT USES LINEAR LAYOUT - HORIZONTAL

**MainActivity.java**

```java
package com.example.linearlayout;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }

}
```

**Activity_main.xml**

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:orientation="horizontal"

    android:padding="16dp">


    <!-- TextView -->

    <TextView

        android:id="@+id/textView2"

        android:layout_width="0dp"

        android:layout_height="wrap_content"

        android:layout_weight="1"

        android:text="LinearLayout - Horizontal"

        android:textColor="#E91E63"

        android:textSize="18sp"
```

```xml
        android:textAlignment="center"

        android:gravity="center" />


    <!-- Button 1 -->
    <Button

        android:id="@+id/btnca"

        android:layout_width="0dp"

        android:layout_height="wrap_content"

        android:layout_weight="1"

        android:text="Button 1"

        android:textAllCaps="false" />


    <!-- Button 2 -->
    <Button

        android:id="@+id/btn2"

        android:layout_width="0dp"

        android:layout_height="wrap_content"

        android:layout_weight="1"

        android:text="Button 2"

        android:textAllCaps="false" />
</LinearLayout>
```
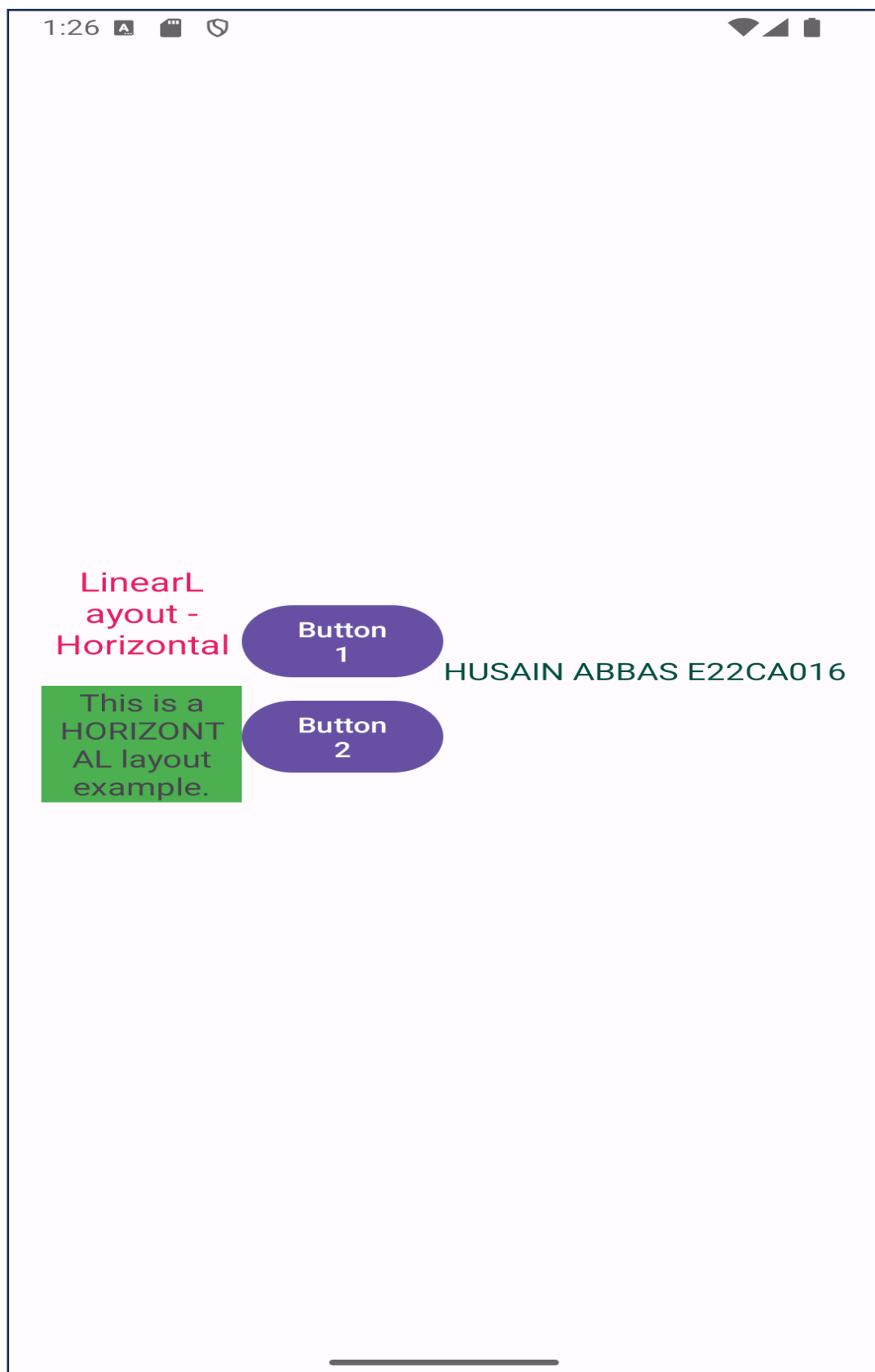
**EX NO: 10**

**DATE:**

**DEVELOP AN ANDROID APPLICATION THAT USING RELATIVE LAYOUT**

**<u>MainActivity.java</u>**

```
package com.example.relativelayout;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }

}
```

**<u>Activity_main.xml</u>**

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

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:padding="16dp">


    <!-- Button 1: Top Left -->
    <Button

        android:id="@+id/button1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Top Left Button"

        android:layout_alignParentLeft="true"

        android:layout_alignParentTop="true"

        android:layout_margin="8dp" />
```

```xml
<!-- Button 2: Top Right -->
<Button
    android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Top Right Button"
    android:layout_alignParentRight="true"
    android:layout_alignParentTop="true"
    android:layout_margin="8dp" />
<!-- Button 3: Bottom Left -->
<Button
    android:id="@+id/button3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Bottom Left Button"
    android:layout_alignParentLeft="true"
    android:layout_alignParentBottom="true"
    android:layout_margin="8dp" />
<!-- Button 4: Bottom Right -->
<Button
    android:id="@+id/button4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Bottom Right Button"
    android:layout_alignParentRight="true"
    android:layout_alignParentBottom="true"
    android:layout_margin="8dp" />

</RelativeLayout>
```
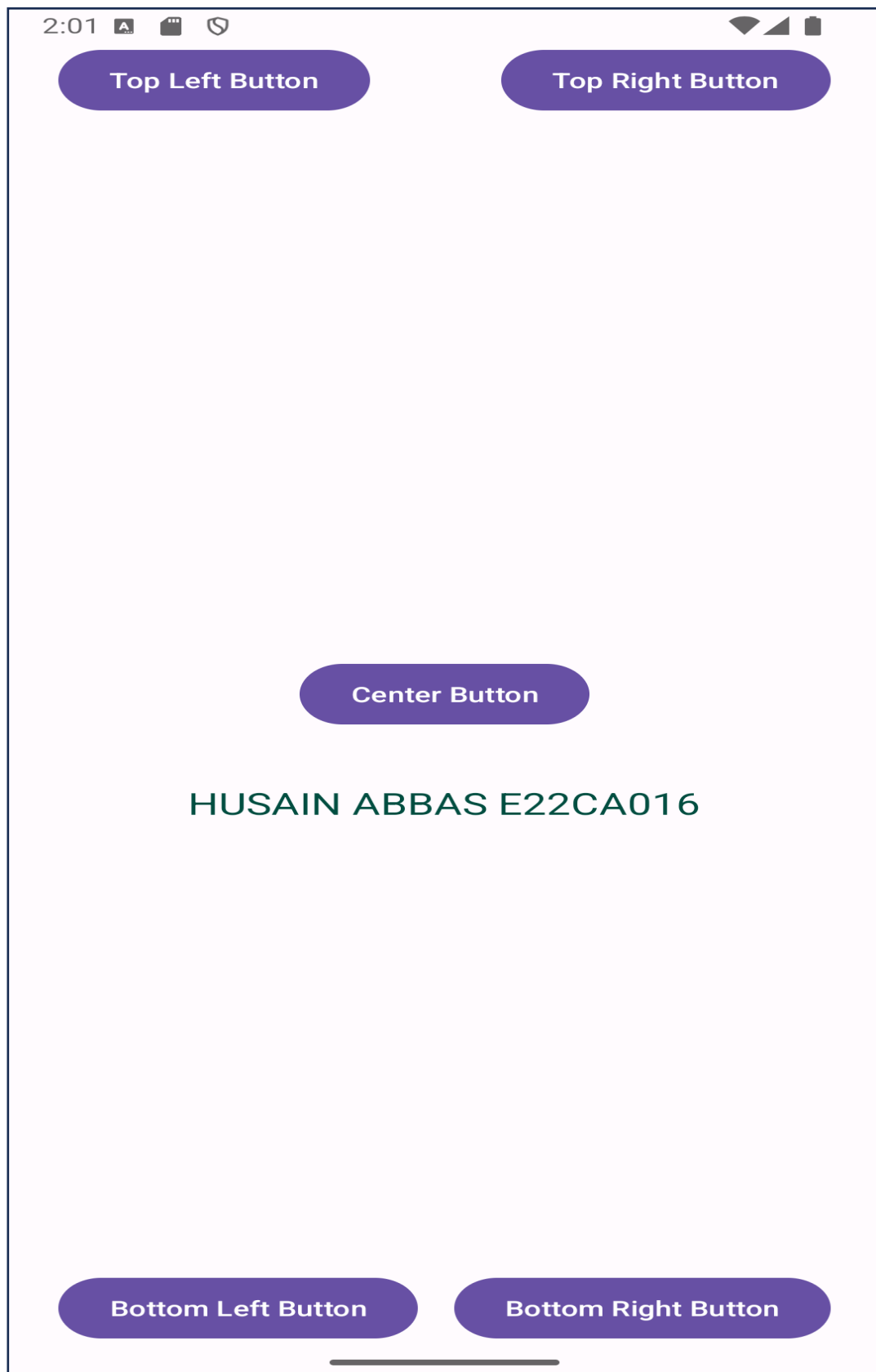
**EX NO: 11**

**DATE:**

## DEVELOP AN ANDROID APPLICATION THAT USES AUDIO MODE (NORMAL SILENT VIBRATE)

**<u>MainActivity.java</u>**

```java
package com.example.audiomode;

import android.media.AudioManager;

import android.os.Bundle;

import android.app.Activity;

import android.content.Context;

import android.view.View;

public class MainActivity extends Activity {

    private Button b1, b2, b3;

    private AudioManager am;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        b1 = findViewById(R.id.button1);

        b2 = findViewById(R.id.button2);

        b3 = findViewById(R.id.button3);

        am = (AudioManager) getSystemService(Context.AUDIO_SERVICE);

        b1.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View v) {

                am.setRingerMode(AudioManager.RINGER_MODE_SILENT);

                Toast.makeText(MainActivity.this, "Silent mode activated",
Toast.LENGTH_SHORT).show();

            @Override

            public void onClick(View v) {

                am.setRingerMode(AudioManager.RINGER_MODE_VIBRATE);

                Toast.makeText(MainActivity.this, "Vibrate mode activated",
Toast.LENGTH_SHORT).show();
```

```java
        b3.setOnClickListener(new View.OnClickListener() {

            public void onClick(View v) {

                am.setRingerMode(AudioManager.RINGER_MODE_NORMAL);

                Toast.makeText(MainActivity.this, "Normal mode activated",
Toast.LENGTH_SHORT).show();

            }

        });

}
```

**Activity_main.xml**

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:orientation="vertical"

    android:padding="16dp"

    android:gravity="center">

    <!-- Button for Silent Mode -->

    <Button

        android:id="@+id/button1"

        android:text="Silent Mode"

        android:layout_marginBottom="16dp" />

    <!-- Button for Vibrate Mode -->

    <Button

        android:id="@+id/button2"

        android:layout_width="wrap_content"

        android:text="Vibrate Mode"

        android:layout_marginBottom="16dp" />]

    <!-- Button for Normal Mode -->

    <Button

        android:id="@+id/button3"

        android:layout_height="wrap_content"

        android:text="Normal Mode" />

</LinearLayout>
```

**OUTPUT**



SILENT MODE

VIBRATE MODE

NORMAL MODE

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Vibrate mode activated
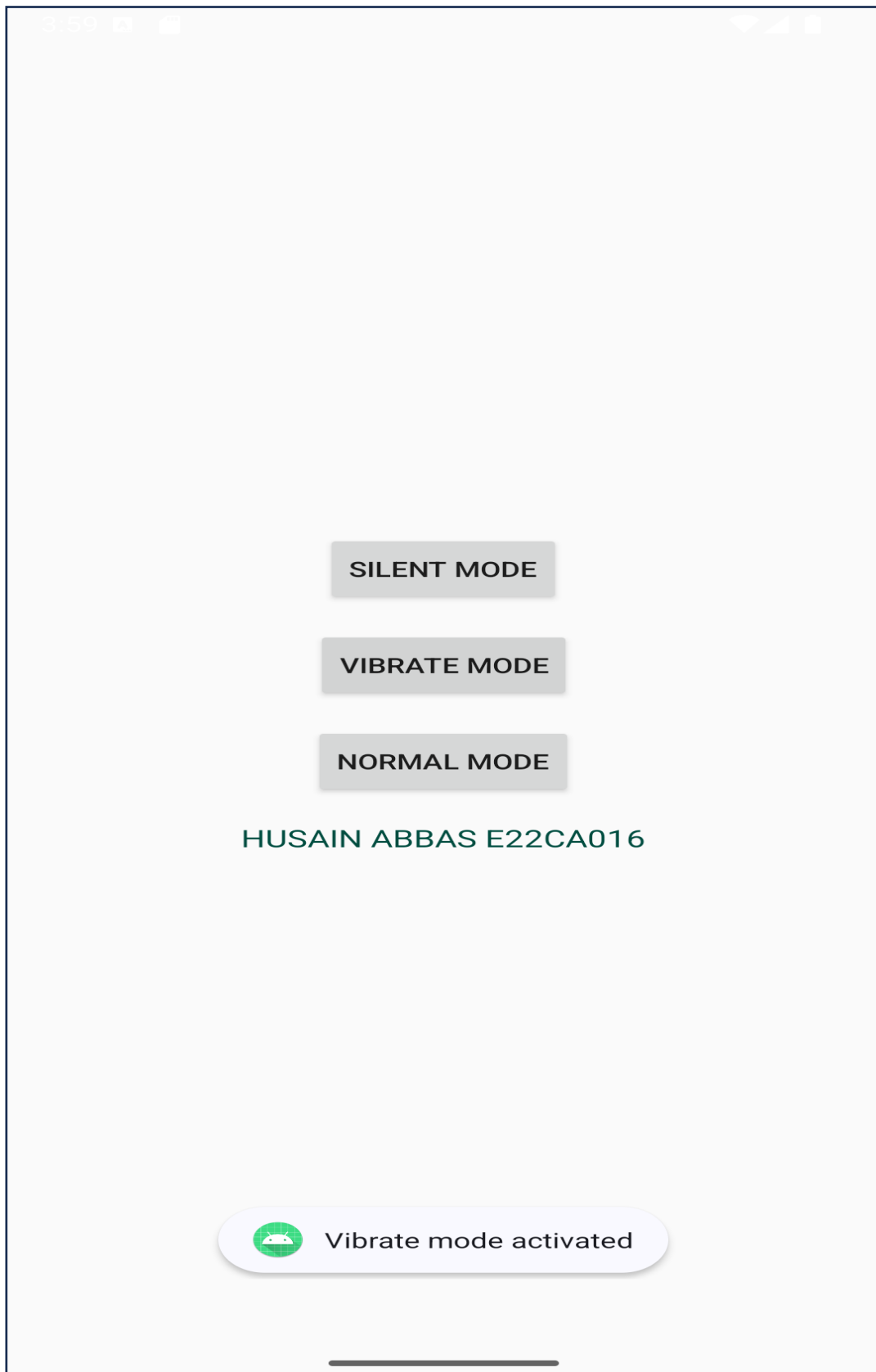
**EX NO: 12**

**DATE:**

### DEVELOP AN ANDROID APPLICATION THAT USES TO SEND MESSAGES FROM ONE MOBILE TO ANOTHER MOBILE

**AndroidManifest.xml**

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.sendsms">
    <!-- Permission to send SMS -->
    <uses-permission android:name="android.permission.SEND_SMS" />
    <!-- Permission to access the internet (not required for SMS, but included as per your request) -->
</manifest>
```

**MainActivity.java**

```java
package com.example.sendsms;
import android.Manifest;
import android.content.pm.PackageManager;
import android.os.Bundle;
import android.telephony.SmsManager;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
    private static final int SMS_PERMISSION_CODE = 1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        if (ActivityCompat.checkSelfPermission(this, Manifest.permission.SEND_SMS) !=
PackageManager.PERMISSION_GRANTED) {
            ActivityCompat.requestPermissions(this, new String[]{Manifest.permission.SEND_SMS},
```

```java
    public void onMessage(View v) {

        String phoneNumber = et1.getText().toString();

        String message = et2.getText().toString();

        if (phoneNumber.isEmpty() || message.isEmpty()) {

            Toast.makeText(this, "Please enter a phone number and message.",
Toast.LENGTH_SHORT).show();

            return;

            SmsManager smsManager = SmsManager.getDefault();

            smsManager.sendTextMessage(phoneNumber, null, message, null, null);

            Toast.makeText(this, "SMS sent.", Toast.LENGTH_LONG).show();

        } catch (Exception e) {

            Toast.makeText(this, "Failed to send SMS.", Toast.LENGTH_LONG).show();

            e.printStackTrace();

        }

    }

}
```

## Activity_main.xml

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:orientation="vertical"

    android:padding="16dp">

    <!-- TextView for instructions -->

    <TextView

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:text="Enter the phone number of recipient"

        android:textSize="18sp"

        android:layout_marginBottom="16dp" />


    <!-- EditText for phone number -->
```

```xml
    <EditText

        android:id="@+id/number"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter Receiver's Phone Number"

        android:inputType="phone"

        android:layout_marginBottom="16dp" />


    <!-- EditText for message content -->
    <EditText

        android:id="@+id/content"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter Message"

        android:inputType="textMultiLine"

        android:minHeight="100dp"

        android:layout_marginBottom="16dp" />


    <!-- Button to send SMS -->
    <Button

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Send SMS"

        android:onClick="onMessage"

        android:layout_gravity="center_horizontal" />
</LinearLayout>
```

Enter the phone number of recipient

123456789

Hey HUSAIN ABBAS

SEND SMS

SMS sent.

**EX NO: 13**

**DATE:**

## DEVELOP AN ANDROID APPLICATION THAT USES TO SEND EMAIL

**MainActivity.java**

```java
package com.example.sendmail;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

    }

    public void sendEmail(View v) {

        Log.i("Send email", "");

        String[] TO = {"recipient@example.com"}; // Replace with the recipient's email

        String[] CC = {"cc@example.com"}; // Replace with CC email (optional)

        Intent emailIntent = new Intent(Intent.ACTION_SEND);

        emailIntent.setData(Uri.parse("mailto:"));

        emailIntent.setType("text/plain");

        emailIntent.putExtra(Intent.EXTRA_EMAIL, TO);

        emailIntent.putExtra(Intent.EXTRA_CC, CC);

        emailIntent.putExtra(Intent.EXTRA_SUBJECT, "Type Your Subject Here");

        emailIntent.putExtra(Intent.EXTRA_TEXT, "You can write your email message here");

        try {

            startActivity(Intent.createChooser(emailIntent, "Choose an Email client"));

            Log.i("Finished sending email", "");
```

```
        } catch (android.content.ActivityNotFoundException ex) {

            Toast.makeText(this, "There is no email client installed.", Toast.LENGTH_LONG).show();

        }

    }

}
```

**<u>Activity_main.xml</u>**

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    android:gravity="center">


    <!-- Button to send email -->
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send Email"
        android:onClick="sendEmail"
        android:layout_gravity="center_horizontal" />
</LinearLayout>
```
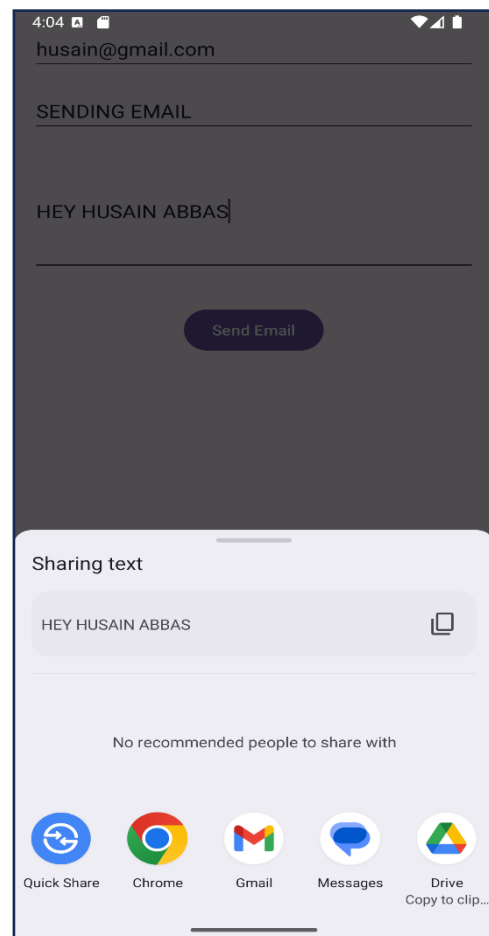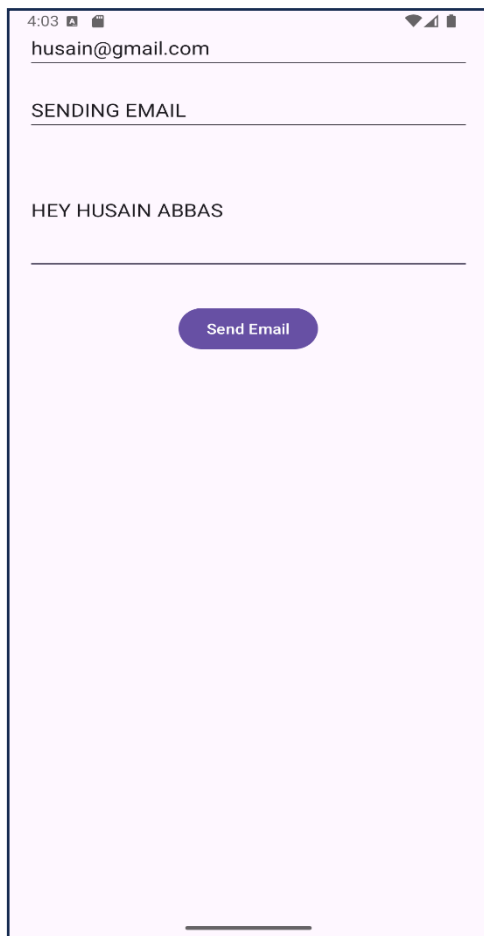
**EX NO: 14**

**DATE:**

### DEVELOP AN ANDROID APPLICATION FOR MOBILE CALL

**AndroidManifest.xml**

```xml
<manifest xmlns:android="http://schemas.android.com/apk/res/android"

    package="com.example.call"> <uses-permission
android:name="android.permission.CALL_PHONE" />

    <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.Call"> <activity android:name=".MainActivity"

            android:exported="true"> <intent-filter>

                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />

            </intent-filter>

        </activity>

    </application>


</manifest>
```

**MainActivity.java**

```java
package com.example.call;

import android.content.Intent;

import android.content.pm.PackageManager;

import android.net.Uri;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;
```

```java
import androidx.core.app.ActivityCompat;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        EditText txtPhone = findViewById(R.id.mblTxt);

        Button btn = findViewById(R.id.btnCall);

        btn.setOnClickListener(v -> {

            String phoneNumber = txtPhone.getText().toString();

            if (phoneNumber.isEmpty()) {

                Toast.makeText(this, "Enter a phone number", Toast.LENGTH_SHORT).show();

                return;

            }

            if (ActivityCompat.checkSelfPermission(this, Manifest.permission.CALL_PHONE) !=
PackageManager.PERMISSION_GRANTED) {

                ActivityCompat.requestPermissions(this, new
String[]{Manifest.permission.CALL_PHONE},

                return;

            }

            startActivity(new Intent(Intent.ACTION_CALL, Uri.parse("tel:" + phoneNumber)));

        });

    }

    @Override
    public void onRequestPermissionsResult(int requestCode, String[] permissions, int[] grantResults)
{

        super.onRequestPermissionsResult(requestCode, permissions, grantResults);

        if (requestCode == 101 && grantResults.length > 0 && grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {

            ((Button) findViewById(R.id.btnCall)).performClick();

        } else {

            Toast.makeText(this, "Permission denied", Toast.LENGTH_SHORT).show();

        }

    }
```

}

## Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    android:gravity="center">

    <EditText
        android:id="@+id/mblTxt"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Phone Number"
        android:inputType="phone"
        android:layout_marginBottom="16dp" />

    <Button
        android:id="@+id/btnCall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Call" />
</LinearLayout>
```
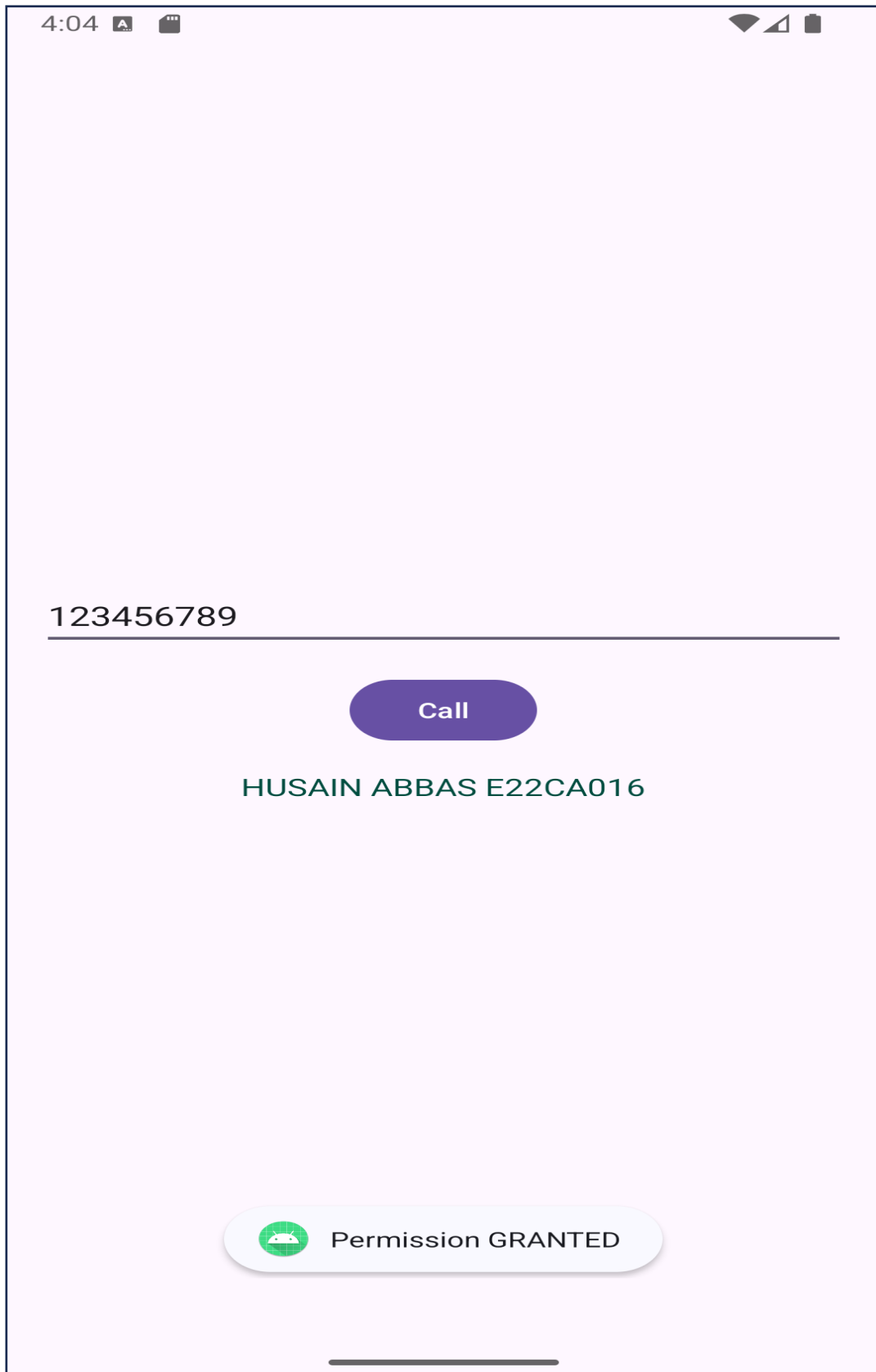
**EX NO: 15**

**DATE:**

## DEVELOP AN ANDROID APPLICATION FOR STUDENT MARKSHEET PROCESSING

### MainActivity.java

```
package com.example.studentmarkprocessing;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import androidx.appcompat.app.AppCompatActivity;

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        ed1 = findViewById(R.id.stname);

        ed2 = findViewById(R.id.mark1);

        ed3 = findViewById(R.id.mark2);

        ed4 = findViewById(R.id.mark3);

        ed5 = findViewById(R.id.total); // Initialize TextViews

    public void stmarks() {

        int m1, m2, m3, tot;

        double avg;

        String grade;

            avg = (double) tot / 3;

            ed6.setTet(String.format("%.2f", avg));

            if (avg > 75)

                grade = "A";

            } else if (avg > 65) {

                grade = "B";

            } else if (avg > 55) {

                grade = "C";

            } else if (avg > 40) {
```

```java
            grade = "S";
        } else {
            grade = "Fail";
        }
        ed7.setText(grade);
    } catch (NumberFormatException e) {
        ed5.setText("Invalid Input");
        ed6.setText("Invalid Input");
        ed7.setText("Invalid Input");
    public void clear() {
        ed1.setText("");
        ed2.setText("");
        ed3.setText("");
        ed4.setText("");
        ed5.setText(""); // Clear TextViews
```

**<u>Activity_main.xml</u>**

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">
    <EditTex
        android:id="@+id/stname"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Student Name"
        android:inputType="text" /
    <EditText
        android:id="@+id/mark1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
```

```xml
        android:hint="Mark 1"

        android:inputType="number" />
    <EditText

        android:id="@+id/mark2"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Mark 2"

        android:inputType="number" />
    <EditText

        android:id="@+id/mark3"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Mark 3"

        android:inputType="number" />
    <TextView  android:id="@+id/total"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Total" />
    <Button

        android:id="@+id/btn1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Calculate" />
    <Button

        android:id="@+id/btn2"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Clear" />


</LinearLayout>
```

**OUTPUT**



HUSAIN ABBAS

100

100

100

300
100.00
A

**Calculate**

**Clear**

**EX NO: 16**

**DATE:**

### DEVELOP AN ANDROID APPLICATION FOR PAYROLL PROCESSING

**MainActivity.java**

```java
package com.example.payrollapp;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    EditText etName, etHours, etRate;

    Button btnCalc;

    TextView tvResult;

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        etName = findViewById(R.id.etName);

        tvResult = findViewById(R.id.tvResult);

        btnCalc.setOnClickListener(v -> calculate());

    }

    private void calculate() {

        String name = etName.getText().toString().trim();

        String hoursStr = etHours.getText().toString().trim();

        String rateStr = etRate.getText().toString().trim();

        if (name.isEmpty() || hoursStr.isEmpty() || rateStr.isEmpty()) {

            Toast.makeText(this, "Enter all details", Toast.LENGTH_SHORT).show();

            return;

            double salary = hours * rate;
```

```
            Toast.makeText(this, "Invalid input", Toast.LENGTH_SHORT).show();

        }

    }

}
```

**<u>Activity_main.xml</u>**

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">
    <EditText
        android:id="@+id/etName"
        android:layout_height="wrap_content"
        android:hint="Name"
        android:inputType="text" />
    <EditText
        android:id="@+id/etRate"
        android:layout_height="wrap_content"
        android:hint="Rate"
        android:inputType="numberDecimal" />
    <Button
        android:id="@+id/btnCalc"
        android:layout_height="wrap_content"
        android:text="Calculate" />
    <TextView
        android:id="@+id/tvResult"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp" />
</LinearLayout>
```

4:07

HUSAIN ABBAS

12

500

Calculate

Employee: HUSAIN ABBAS
Salary: ₹6000.00

**EX NO: 17**

**DATE:**

<center>**DEVELOP AN ANDROID APPLICATION FOR LOGIN PAGE**</center>

**MainActivity.java**

```java
package com.example.login;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    EditText etUsername, etPassword;

    Button btnLogin;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        etUsername = findViewById(R.id.etUsername);  // Correct IDs

        etPassword = findViewById(R.id.etPassword);

        btnLogin = findViewById(R.id.btnLogin);

        btnLogin.setOnClickListener(v -> { // Lambda expression

            String username = etUsername.getText().toString();

            String password = etPassword.getText().toString();

            if (username.equals("admin") && password.equals("1234")) {

                Toast.makeText(this, "Success", Toast.LENGTH_SHORT).show(); // Short duration

            } else {

                Toast.makeText(this, "Fail", Toast.LENGTH_SHORT).show();

                etUsername.setText(""); // Clear fields

                etPassword.setText("");

            }

        });

    }
```

}

**Activity_main.xml**

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">
    <EditText
        android:id="@+id/etUsername"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Username"
        android:inputType="text" />
    <EditText
        android:id="@+id/etPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Password"
        android:inputType="textPassword" />
    <Button
        android:id="@+id/btnLogin"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login" />
</LinearLayout>
```
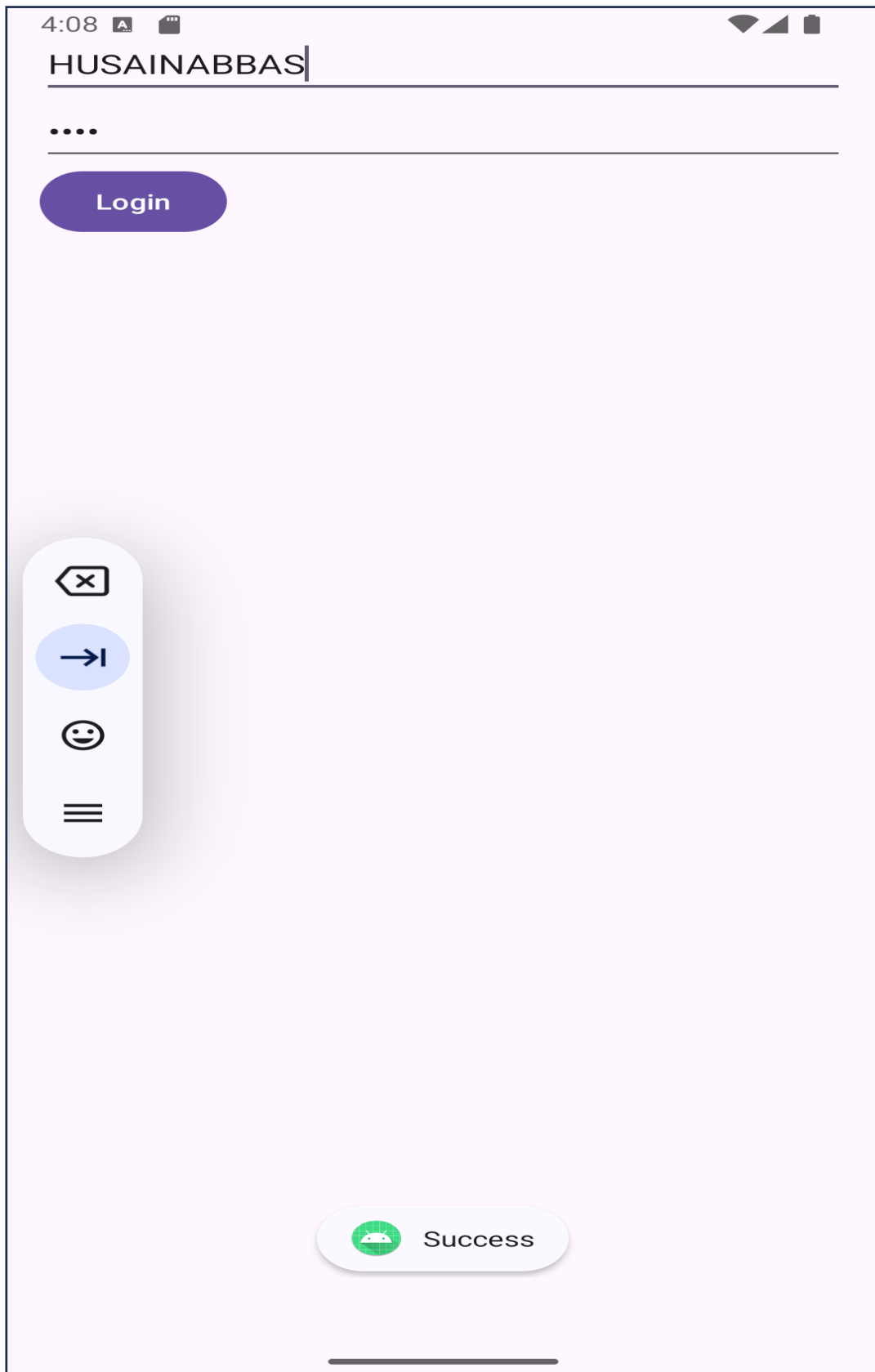
**EX NO: 18**

**DATE:**

## DEVELOP AN ANDROID APPLICATION FOR GOOGLE MAP LOCATOR

### AndroidManifest.xml

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

   package="com.example.gmap1"> <uses-permission android:name="android.permission.INTERNET" />

   <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.Gmap1"> <activity

         android:name=".MainActivity"

         android:exported="true"> <intent-filter>

            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />

         </intent-filter>

      </activity>

   </application>

</manifest>

### MainActivity.java

package com.example.gmap1;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.widget.Button;

import androidx.appcompat.app.AppCompatActivity;

```java
public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

            Uri gmmIntentUri = Uri.parse("geo:0,0?q=your+search+term"); // Or specific coordinates

            Intent mapIntent = new Intent(Intent.ACTION_VIEW, gmmIntentUri);

            mapIntent.setPackage("com.google.android.apps.maps"); // Explicitly set Google Maps package

            if (mapIntent.resolveActivity(getPackageManager()) != null) { // Check if Maps is installed

                startActivity(mapIntent);

            } else {

                String mapUrl = "https://www.google.com/maps/search/your+search+term"; // Or use geo URI

                Intent browserIntent = new Intent(Intent.ACTION_VIEW, Uri.parse(mapUrl));

                startActivity(browserIntent);

            }

        });

    }

}
```

**Activity_main.xml**

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:gravity="center">  <Button

        android:id="@+id/click"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Open Maps" />


</LinearLayout>
```