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**LABORATORY RECORD
YEAR: 2022 TO 2023**

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Certified that this is a Bonafide Record of Practical work done in partial fulfillment of the requirements for the award of the Degree in Master of Computer Applications of Sree Narayana Gurukulam College of Engineering.

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PROGRAM NO:5

DATE:25/09/22

INTENTS AND SHARED PREFERENCES

AIM:Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences

PAGE 1

XML CODE:

```
<?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">
```

```
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:gravity="center"
    android:background="@color/black"
    android:textColor="@color/white"
    android:text="ENTER THE DETAILS"
    android:layout_marginTop="30px"
    android:textSize="25sp"
    />
```

```
<EditText
    android:id="@+id/fullname"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:layout_marginTop="30sp"
    android:inputType="textPersonName"
    android:hint="FULL NAME" />
```

```
<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:layout_marginTop="30sp"
    android:hint="EMAIL"
    android:inputType="textPersonName" />
```

```
<EditText
    android:id="@+id/location"
    android:layout_width="match_parent"
```

```
android:layout_height="wrap_content"
android:ems="10"
android:layout_marginTop="30sp"
android:inputType="textPersonName"
android:hint="LOCATION" />
```

```
<Button
android:id="@+id/button"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="30sp"
android:onClick="reg"
android:text="REGISTER" />
```

```
</LinearLayout>
```

JAVA CODE:

```
package com.example.registration_intent_shared;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
    EditTextname,email,location;
    SharedPreferencessp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        name=findViewById(R.id.fullname);
        email=findViewById(R.id.email);
        location=findViewById(R.id.location);
        sp=getSharedPreferences("register",MODE_PRIVATE);
    }
```

```
    public void reg(View view) {
        Toast.makeText(this,"REGISTERED
        SUCCESSFULLY",Toast.LENGTH_SHORT).show();
        Intent i=new Intent(MainActivity.this,MainActivity2.class);
        String val1=name.getText().toString();
```

```
String val2=email.getText().toString();
```

```
        i.putExtra("name",val1);
        i.putExtra("email",val2);
```

```
        SharedPreferences.Editor ed=sp.edit();
        ed.putString("location",location.getText().toString());
        ed.commit();
        startActivity(i);
```

```
}  
}
```

PAGE 2

XML CODE:

```
<?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=".MainActivity2">
```

```
<TextView  
  android:id="@+id/det"  
  android:layout_width="match_parent"  
  android:layout_marginTop="30px"  
  android:fontFamily="serif"  
  android:textStyle="bold"  
  android:textColor="@color/white"  
  android:gravity="center"  
  android:background="@color/black"  
  android:textSize="25sp"  
  android:layout_height="wrap_content"  
  android:text="REGISTRATION DETAILS" />
```

```
<TextView  
  android:id="@+id/name"  
  android:layout_width="match_parent"  
  android:layout_marginTop="30px"  
  android:fontFamily="serif"  
  android:textStyle="bold"  
  android:textColor="#5981f7"  
  android:gravity="center"  
  android:textSize="25sp"  
  android:layout_height="wrap_content"  
  android:text="NAME" />
```

```
<TextView  
  android:id="@+id/email"  
  
  android:textColor="#5981f7"  
  android:fontFamily="serif"  
  android:layout_marginTop="30px"  
  android:textSize="25sp"  
  android:textStyle="bold"  
  android:gravity="center"  
  android:layout_width="match_parent"  
  android:layout_height="wrap_content"  
  android:text="EMAIL" />
```

```
<TextView
```

```
android:id="@+id/location"
android:textColor="#5981f7"
android:fontFamily="serif"
android:layout_marginTop="30px"
android:textSize="25sp"
android:textStyle="bold"
android:gravity="center"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="LOCATION" />
</LinearLayout>
```

JAVA CODE:

```
package com.example.registration_intent_shared;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {
    TextView t1,t2,t3;
    SharedPreferences sp;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        t1=findViewById(R.id.name);
        t2=findViewById(R.id.email);
        t3=findViewById(R.id.location);
        sp=getSharedPreferences("register",MODE_PRIVATE);

        Intent intent=getIntent();
        String val1=intent.getStringExtra("name");
        String val2=intent.getStringExtra("email");
        String val3=sp.getString("location","");

        t1.setText("NAME: "+val1);

        t2.setText("EMAIL: "+val2);
        t3.setText("LOCATION: "+val3);

    }
}
```

OUTPUT

REGISTRATION	REGISTRATION
ENTER THE DETAILS	REGISTRATION DETAILS
sanila lorance	NAME: sanila lorance
sanila@gmail.com	EMAIL: sanila@gmail.com
wayanad	LOCATION: wayanad
REGISTER	
	REGISTERED SUCCESSFULLY

PROGRAM NO:6

DATE:30/09/22

GRID CALCULATOR

AIM:Design a simple Calculator using GridLayout and Cascaded LinearLayout

XML CODE:

```
<?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">
```

```
<TextView
    android:id="@+id/textView"
    android:layout_width="match_parent"
    android:layout_marginTop="5dp"
    android:layout_height="40dp"
    android:background="#16B7CA"
    android:gravity="center"
    android:textColor="#0E0E0D"
    android:text="WELCOME" />
```

```
<EditText
    android:id="@+id/display"
    android:layout_marginTop="30dp"
    android:layout_width="390dp"
    android:layout_gravity="center"
    android:layout_height="80dp"
    android:gravity="center"
    android:hint="Result"
    android:inputType="textPersonName"
    />
```

```
<androidx.gridlayout.widget.GridLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="30dp"
    android:layout_gravity="center">
```

```
<Button
    android:id="@+id/b7"
    android:layout_width="wrap_content"
    android:layout_height="54dp"
    android:backgroundTint="#6e7778"
```

```
    android:text="7"
    app:layout_column="0"
    app:layout_row="0" />
```



```
<Button
android:id="@+id/b8"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="8"
app:layout_column="1"
app:layout_row="0" />
```

```
<Button
android:id="@+id/b9"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="9"
app:layout_column="2"
app:layout_row="0" />
```

```
<Button
android:id="@+id/div"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#3C393B"
android:text="/"
app:layout_column="3"
app:layout_row="0" />
```

```
<Button
android:id="@+id/b4"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:backgroundTint="#6e7778"
android:text="4"
app:layout_column="0"
app:layout_row="1" />
```

```
<Button
android:id="@+id/b5"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="5"
app:layout_column="1"
app:layout_row="1" />
```

```
<Button
android:id="@+id/b6"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
```

```
android:text="6"
app:layout_column="2"
app:layout_row="1" />
```

```
<Button
android:id="@+id/mul"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#3C393B"
android:text="x"
app:layout_column="3"
app:layout_row="1" />
```

```
<Button
android:id="@+id/b1"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:backgroundTint="#6e7778"
android:text="1"
app:layout_column="0"
app:layout_row="2" />
```

```
<Button
android:id="@+id/b2"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="2"
app:layout_column="1"
app:layout_row="2" />
```

```
<Button
android:id="@+id/b3"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="3"
app:layout_column="2"
app:layout_row="2" />
```

```
<Button
android:id="@+id/sub"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#3C393B"
android:text="-"
app:layout_column="3"
app:layout_row="2" />
```

```
<Button
android:id="@+id/clr"

```

```
android:layout_width="wrap_content"
android:layout_height="54dp"
android:backgroundTint="#3C393B"
android:text="clr"
app:layout_column="0"
app:layout_row="3" />
```

```
<Button
android:id="@+id/b0"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#6e7778"
android:text="0"
app:layout_column="1"
app:layout_row="3" />
```

```
<Button
android:id="@+id/equal"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#3C393B"
android:text="="
app:layout_column="2"
app:layout_row="3" />
```

```
<Button
android:id="@+id/add"
android:layout_width="wrap_content"
android:layout_height="54dp"
android:layout_marginLeft="10dp"
android:backgroundTint="#3C393B"
android:text="+"
app:layout_column="3"
app:layout_row="3" />
```

```
</androidx.gridlayout.widget.GridLayout>
```

```
</LinearLayout>
```

JAVA CODE:

```
package com.example.gridcalculator;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
```

```
public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    EditText number;
    double num1=0;
    double num2=0;
    String op="";
```

Button b1, b2, b3, b4, b5, b6, b7, b8, b9, b0, sum, sub, mul, div, equal, clear;

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

```
        number = findViewById(R.id.display);
        b0 = findViewById(R.id.b0);
        b1 = findViewById(R.id.b1);
        b2 = findViewById(R.id.b2);
        b3 = findViewById(R.id.b3);
        b4 = findViewById(R.id.b4);
        b5 = findViewById(R.id.b5);
        b6 = findViewById(R.id.b6);
        b7 = findViewById(R.id.b7);
        b8 = findViewById(R.id.b8);
        b9 = findViewById(R.id.b9);
```

```
        sum = findViewById(R.id.add);
        sub = findViewById(R.id.sub);
        mul = findViewById(R.id.mul);
        div = findViewById(R.id.div);
```

```
        equal = findViewById(R.id.equal);
        clear = findViewById(R.id.clr);
```

```
        b0.setOnClickListener(this);
        b1.setOnClickListener(this);
        b2.setOnClickListener(this);
        b3.setOnClickListener(this);
        b4.setOnClickListener(this);
```

```
        b5.setOnClickListener(this);
        b6.setOnClickListener(this);
        b7.setOnClickListener(this);
        b8.setOnClickListener(this);
        b9.setOnClickListener(this);
```

```
        mul.setOnClickListener(this);
        div.setOnClickListener(this);SSSSS
        sub.setOnClickListener(this);
        sum.setOnClickListener(this);
        clear.setOnClickListener(this);
        equal.setOnClickListener(this);
    }
```

```
@Override
public void onClick(View view) {
    Button b= (Button) view;
    if(view==clear)
    {
        number.setText("");
    }
}
```

```

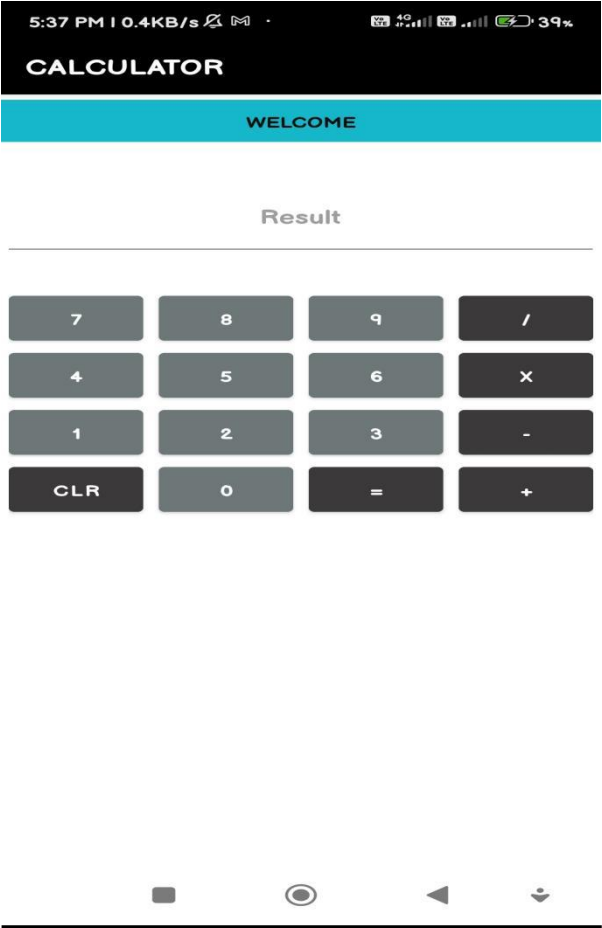
else if(view==sub||view==sum||view==mul||view==div)
{
    num1=Integer.parseInt(number.getText().toString());
    op=b.getText().toString();
number.setText("");
}

else if(view==equal)
{
    num2=Integer.parseInt(number.getText().toString());
    if(op.equals("+"))
    {
number.setText(num1+num2+"");
    }
    else if(op.equals("-"))
    {
number.setText(num1-num2+"");
    }
    else if(op.equals("x"))
    {
number.setText(num1*num2+"");
    }
    else if(op.equals("/"))
    {
number.setText(num1/num2+"");
    }
}
else

{
    String s=number.getText().toString();
number.setText(s+b.getText().toString());
}
}
}

```

OUTPUT



PROGRAM NO:7

DATE:05/10/22

FACEBOOK PAGE

AIM:Create a Facebook page using RelativeLayout; set properties using .xml file

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"
    android:background="#2677e0"
    tools:context=".MainActivity">

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="190dp"
        android:layout_height="189dp"
        android:layout_centerHorizontal="true"
        android:foregroundGravity="center"
        app:srcCompat="@drawable/fbb" />

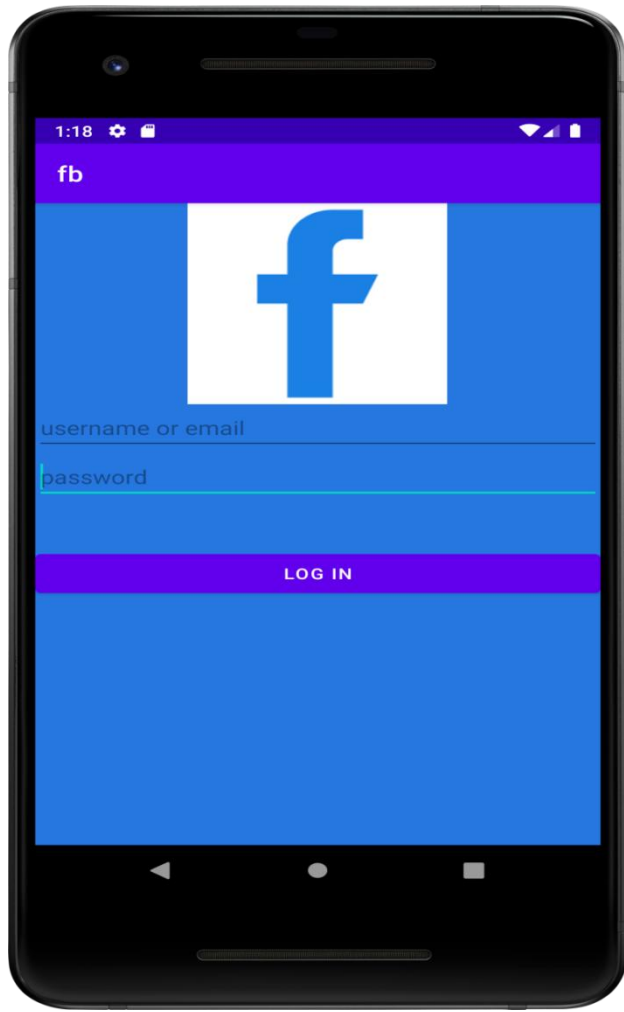
    <EditText
        android:id="@+id/edit"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/imageView"
        android:layout_marginTop="0dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:hint="username or email" />

    <EditText
        android:id="@+id/edit2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/edit"
        android:layout_marginTop="1dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:hint="password" />

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/edit2"
        android:layout_marginTop="44dp"
```

```
android:text="LOG IN" />  
</RelativeLayout>
```

OUTPUT



PROGRAM NO:8

DATE:20/10/22

TOGGLE IMAGE

AIM:Develop an application that toggles image using FrameLayout

XML CODE:

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

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <ImageView
            android:id="@+id/img1"
            android:layout_width="match_parent"
            android:layout_height="215dp"
            app:srcCompat="@android:drawable/btn_star_big_on" />

        <ImageView
            android:id="@+id/img2"
            android:layout_width="match_parent"
            android:layout_height="304dp"
            app:srcCompat="@android:drawable/btn_star" />
    </LinearLayout>
</FrameLayout>
```

JAVA CODE:

```
package com.example.imagetoggle;

import androidx.appcompat.app.AppCompatActivity;

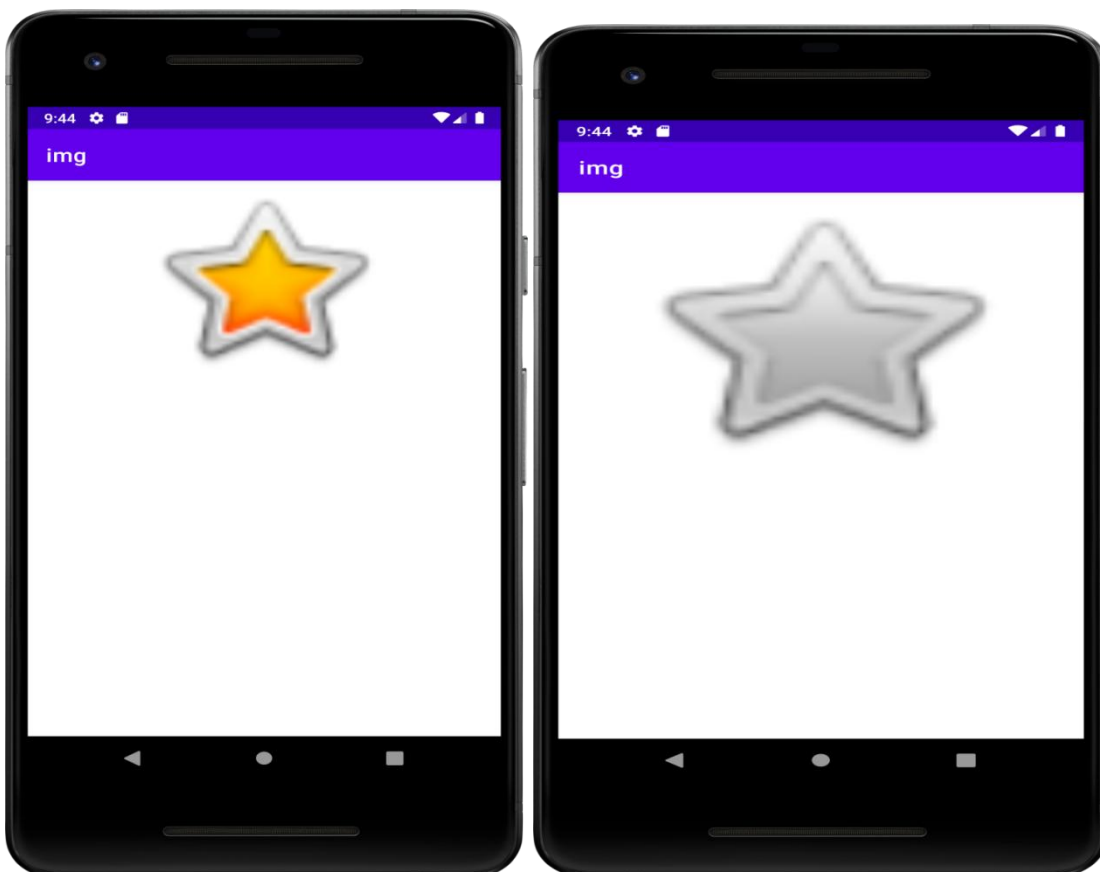
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    ImageView img1,img2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);
    img1=findViewById(R.id.image1);
    img2=findViewById(R.id.image2);
    img1.setOnClickListener(this);
    img2.setOnClickListener(this);
}
@Override
public void onClick(View v) {
    if(v==img1)
    {
        img1.setVisibility(View.GONE);
        img2.setVisibility(View.VISIBLE);
    }
    else
    {
        img2.setVisibility(View.GONE);
        img1.setVisibility(View.VISIBLE);
    }
}
}
```

OUTPUT



PROGRAM NO:9

DATE:30/10/22

INTENT

AIM:Implement Intent to navigate between multiple activities

PAGE 1

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
  <androidx.constraintlayout.widget.ConstraintLayoutxmlns: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">

  <Button
  android:id="@+id/button"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Next Page"
  android:onClick="click"
  tools:layout_editor_absoluteX="144dp"
  tools:layout_editor_absoluteY="157dp"
  tools:ignore="MissingConstraints" />

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

JAVA CODE:

```
package com.example.intent;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    Button b1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        b1=findViewById(R.id.button);

    }
```

```

    public void click(View view) {
        Intent i=new Intent(MainActivity.this,MainActivity2.class);
startActivity(i);
    }
}

```

PAGE 2

XML CODE:

```

<?xml version="1.0" encoding="utf-8"?>
    <androidx.constraintlayout.widget.ConstraintLayoutSxmlns: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">

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="previous page"
        android:onClick="click"
        tools:layout_editor_absoluteX="149dp"
        tools:layout_editor_absoluteY="113dp" />
    </androidx.constraintlayout.widget.ConstraintLayout>

```

JAVA CODE:

```

package com.example.intent;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;

public class MainActivity2 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
    }

    public void click(View view) {

        Intent i=new Intent(MainActivity2.this,MainActivity.class);

        startActivity(i);
    }
}

```

OUTPUT



PROGRAM NO:10**DATE:10/11/22****MENU****AIM:**Implement Options Menu to navigate to activities**MENU**

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
<item
android:id="@+id/item1"
android:title="DEPARTMENT">
<menu>
<item
android:id="@+id/inside1"
android:title="MCA" />
<item
android:id="@+id/inside2"
android:title="MBA" />
</menu>
</item>
<item
android:id="@+id/item2"
android:title="STUDENTS" />
</menu>
```

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">

<TextView
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Hello World!"
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:

```
package com.example.menu;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.Toast;

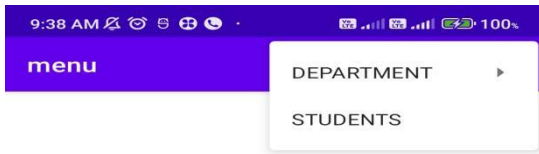
public class MainActivity extends AppCompatActivity {

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

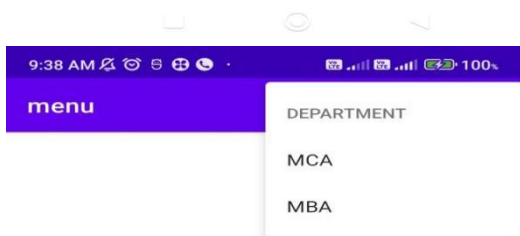
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        MenuInflater inflater=getMenuInflater();
        inflater.inflate(R.menu.menu,menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        switch (item.getItemId()){
            case R.id.inside1:
                Toast.makeText(this,"mca department",Toast.LENGTH_LONG).show();
                break;
            case R.id.inside2:
                Toast.makeText(this, "mba department", Toast.LENGTH_SHORT).show();
                break;
            case R.id.item2:
                Toast.makeText(this, "students", Toast.LENGTH_SHORT).show();
                break;
        }
        return true;
    }
}
```

OUTPUT



Hello World!



Hello World!

PROGRAM NO:11

DATE:20/11/22

DATABASE MANAGEMENT

AIM:Create database using SQLite and perform INSERT,SELECT,UPDATE AND DELETE

XML CODE:

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

<TextView
android:id="@+id/textView"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="TextView" />

<EditText
android:id="@+id/id"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="textPersonName"
android:hint="id" />

<EditText
android:id="@+id/name"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="textPersonName"
android:hint="name" />

<EditText
android:id="@+id/place"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:ems="10"
android:inputType="textPersonName"
android:hint="place" />

<Button
android:id="@+id/insert"
```

```
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="insert" />
```

```
<Button
    android:id="@+id/select"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="select" />
```

```
<Button
    android:id="@+id/update"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="update" />
```

```
<Button
    android:id="@+id/delete"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="delete" />
```

```
<Button
    android:id="@+id/clear"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="clear" />
</LinearLayout>
```

JAVA CODE:

```
package com.example.database_management;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    EditText id,name,place;
    Button insert,select,update,delete,clear;
    AlertDialog.Builder builder;
    SQLiteDatabase db;
    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        id = findViewById(R.id.id);
        name = findViewById(R.id.name);
```

```

place = findViewById(R.id.place);
insert = findViewById(R.id.insert);
select = findViewById(R.id.select);
update = findViewById(R.id.update);
delete = findViewById(R.id.delete);
clear = findViewById(R.id.clear);

builder = new AlertDialog.Builder(this);

try {
db=openOrCreateDatabase("empdb",MODE_PRIVATE,null);
db.execSQL("create table employee(id integer primary key,nameText,place Text)");
Toast.makeText(getApplicationContext(),
"table created successfully",Toast.LENGTH_SHORT).show();

} catch (Exception e) {

}

insert.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        try {
            db.execSQL("insert into employee values(" + id.getText().toString() + "," + name.getText().toString() +
            "," + place.getText().toString() + ")");
            Toast.makeText(getApplicationContext(),
            "inserted successfully", Toast.LENGTH_SHORT).show();
        }
        catch(Exception e)
        {
            Toast.makeText(getApplicationContext(),
            "error", Toast.LENGTH_SHORT).show();
        }
    }
});

clear.setOnClickListener();
select.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Cursor c=db.rawQuery("select * from employee",null);
        if(c.getCount()==0)
        {
            Toast.makeText(getApplicationContext(),
            "no record", Toast.LENGTH_SHORT).show();
        }

    else

    {
        StringBuffer b=new StringBuffer();
        while(c.moveToNext())
        {
            b.append("id:"+c.getString(0)+"\n");
            b.append("name:"+c.getString(1)+"\n");

```

```

b.append("place:"+c.getString(2)+"\n");
Toast.makeText(getApplicationContext(),
b.toString(), Toast.LENGTH_SHORT).show();
builder.setMessage(b.toString());
AlertDialog alert=builder.create();
alert.setTitle("Employee data");
alert.show();
    }
}
}
});

update.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
db.execSQL("update
employee set name='"+name.getText().toString()+"',place='"+place.getText().toString()+" where
id='"+id.getText().toString()+"");
Toast.makeText(getApplicationContext(),
"updated....", Toast.LENGTH_SHORT).show();
    }
});

delete.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
db.execSQL("delete from employee where id='"+id.getText().toString());
    Toast.makeText(getApplicationContext(),"ItemDeleted", Toast.LENGTH_SHORT).show();
    }
});

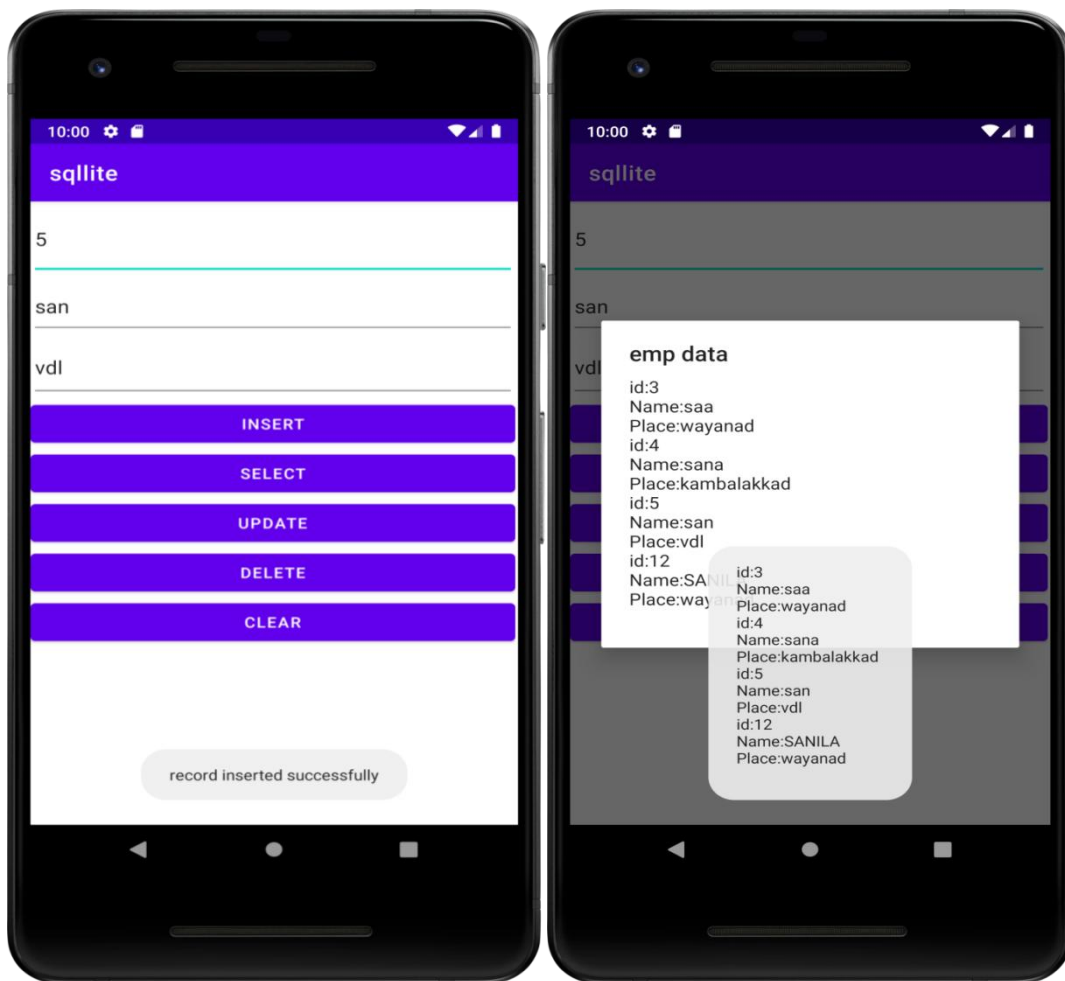
clear.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
id.setText("");
name.setText("");
place.setText("");
    }
});

clear.callOnClick();

}
}

```

OUTPUT



COURSE OUTCOME 1

COURSE OUTCOME 2

COURSE OUTCOME 3

COURSE OUTCOME 5