

SREE NARAYANA GURUKULAM COLLEGE OF ENGINEERING KADAYIRUPPU, KOLENCHERY 682311

LABORATORY RECORD

YEAR: 2022 **TO** 2023

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SEMESTER : 3

ROLL NO : 7
BRANCH : COMPUTER APPLICATIONS

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.

Kadayiruppu Date:			
	Head of the Department	Course Instructor	
	Submitted for University Prac	or University Practical Examination	
	Reg. No: SNG21MCA-2009	on	

External Examiner **Internal Examiner**

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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"</p>
    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"
```

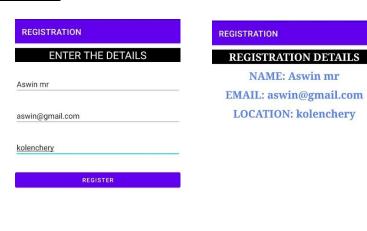
android:inputType="textPersonName" />

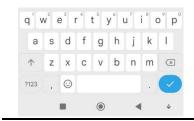
```
<EditText
         android:id="@+id/location"
         android:layout_width="match_parent"
         android:layout_height="wrap_content"
         android:ems="10"
         android:layout_marginTop="30sp"
         android:inputType="textPersonName"
         android:hint="LOCATION" />
    <Button
         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 {
EditText name, email, location;
SharedPreferences sp;
    @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"</p>
     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);
}
```







GRID CALCULATOR

AIM: Design a simple Calculator using GridLayout and Cascaded LinearLayout

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

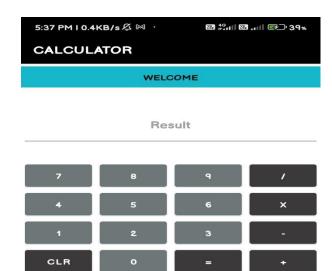
```
android:text="7"
     app:layout_column="0"
     app:layout_row="0" />
 <Button
     android:id="@+id/b8"
     android:layout_width="wrap_content"
     android:layout_height="54dp"
     android:layout_marginLeft="10dp"
     android:backgroundTint="#6e7778"
     android:text="8"
     app:layout_column="1"
     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
```



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FACEBOOK PAGE

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

```
<?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="#3e52ab"
  tools:context=".MainActivity">
  <ImageView
       android:id="@+id/imageView"
       android:layout_width="match_parent"
       android:layout_height="100dp"
       android:layout_gravity="center"
       android:layout_marginTop="40dp"
       app:srcCompat="@drawable/facebook" />
  <EditText
       android:id="@+id/username"
       android:layout_width="match_parent"
       android:layout_height="50dp"
       android:layout_below="@+id/imageView"
       android:layout_marginLeft="10dp"
       android:layout_marginRight="10dp"
       android:layout_marginTop="60dp"
       android:background="@drawable/back"
       android:ems="10"
       android:hint="Email or Phone Number"
       android:inputType="textPersonName"
       android:paddingLeft="30dp"
       android:textColor="@color/white"
       android:textColorHint="@color/white"
       android:textSize="19sp" />
  <EditText
       android:id="@+id/password"
       android:layout_width="match_parent"
       android:layout_height="50dp"
       android:layout_below="@+id/username"
       android:layout_marginLeft="10dp"
       android:layout_marginTop="10dp"
```

```
android:layout_marginRight="10dp"
         android:background="@drawable/back"
         android:ems="10"
         android:hint="password"
         android:inputType="textPersonName"
         android:paddingLeft="30dp"
         android:textColor="@color/white"
         android:textColorHint="@color/white"
         android:textSize="19sp"/>
    <Button
         android:id="@+id/button"
         android:layout_width="260dp"
         android:layout_height="55dp"
         android:layout_below="@+id/password"
         android:layout_centerHorizontal="true"
         android:layout_marginTop="40dp"
         android:backgroundTint="#46b082"
         android:text="Login"
         android:textSize="18sp"/>
    <TextView
         android:id="@+id/textView"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_below="@id/button"
         android:layout_centerHorizontal="true"
         android:layout_marginTop="15dp"
         android:text="Forgot account?"
         android:textColor="@color/white"
         android:textSize="22dp" />
    <View
         android:layout_width="match_parent"
         android:layout_height="2dp"
         android:layout below="@+id/textView"
         android:layout_marginTop="20dp"
         android:background="#94918e" />
    <Button
         android:id="@+id/button2"
         android:layout_width="260dp"
         android:layout_height="55dp"
         android:layout below="@+id/textView"
         android:layout_centerHorizontal="true"
         android:layout_marginTop="70dp"
         android:backgroundTint="#46b082"
         android:text="Create New Account" />
</RelativeLayout>
```

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android:shape="rectangle" >
    <!-- View background color -->
    <solid
         android:color="#3e52ab" >
    </solid>
    <!-- View border color and width -->
    <stroke
         android:width="1dp"
         android:color="@color/white" >
    </stroke>
    <!-- The radius makes the corners rounded -->
         android:radius="4dp"
    </corners>
</shape>
```



TOGGLE IMAGE

AIM: Develop an application that toggles image using FrameLayout

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
    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/image1"
              android:layout_width="match_parent"
              android:layout_height="100dp"
              app:srcCompat="@android:drawable/btn_star"/>
         <ImageView
              android:id="@+id/image2"
              android:layout_width="match_parent"
              android:layout_height="100dp"
              app:srcCompat="@android:drawable/ic_lock_idle_lock"/>
    </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);
}
```







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.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">
    <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>

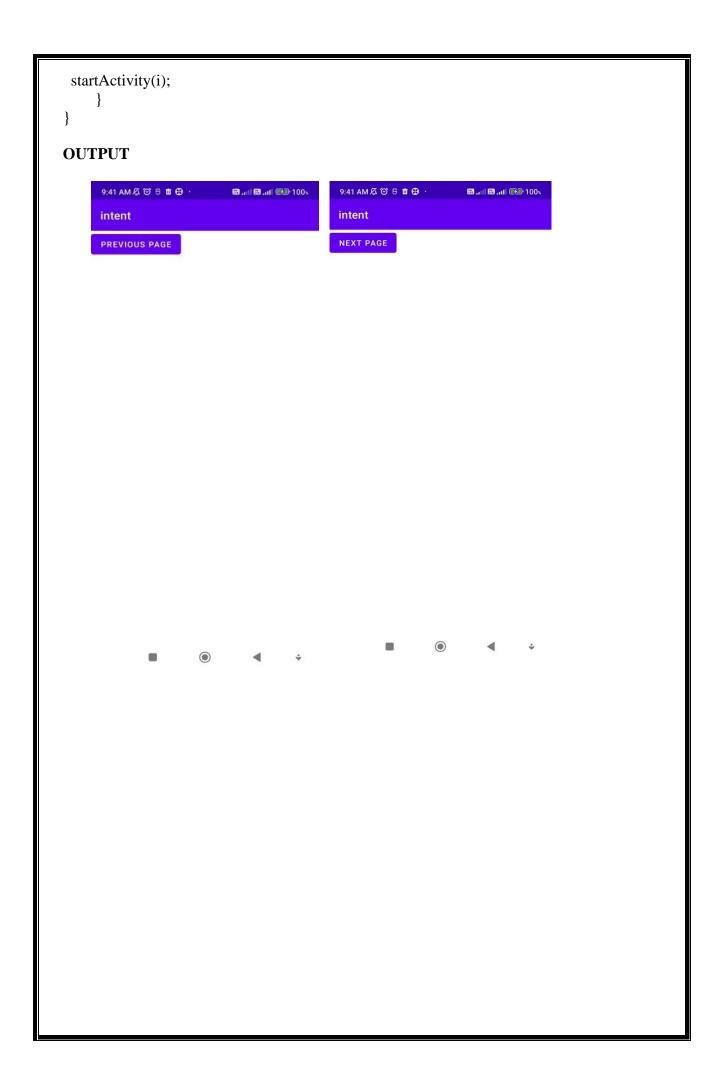
JAVA CODE:

```
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.ConstraintLayout
   Sxmlns: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);
```



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 9:38 AM 及 句 号 😝 🕓 · **₩** and **₩** and **₩** 100x menu DEPARTMENT STUDENTS Hello World! 9:38 AM & 🗑 🖯 🕒 🕓 · 🖼 .atl 🖼 .atl 🕬 100s menu DEPARTMENT MCA MBA Hello World!

PROGRAM NO:11 DATE:20/11/22

DATABASE MANAGEMENT

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

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
   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,name Text,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.callOnClick();
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();
```

```
}
```

