



CSE- 4002 LAB-11 Assignment

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1.) Display Text Message using Toast

JAVA CODE:

```
package com.taran.madlab1;
    import androidx.appcompat.app.AppCompatActivity;
    import android.os.Bundle;
    import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toast.makeText(this, "Hello World", Toast.LENGTH_LONG).show();
    }
}
```

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

<TextView
    android:layout_width="wrap_content"</pre>
```



```
android:layout_height="wrap_content"
android:text="Hello World!"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

2.) Create different types of Text Views. Take the screenshot of the output to find the difference.

JAVA CODE:

Hello World

```
package com.example.madlab1;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

<EditText



```
super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main);
       Toast.makeText(this, "Hello World", Toast.LENGTH LONG).show();
   }
}
XML CODE:
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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:id="@+id/textView"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:text="Different Types of TextViews"
       android:textSize="25sp"
       tools:layout editor absoluteX="40dp"
       tools:layout editor absoluteY="56dp" />
   <EditText
       android:id="@+id/editTextTextPersonName"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:ems="10"
       android:hint="PLAIN TEXT"
       android:inputType="textPersonName"
       tools:layout editor absoluteX="137dp"
       tools:layout editor absoluteY="121dp" />
   <EditText
       android:id="@+id/editTextTextEmailAddress"
       android:layout width="wrap content"
       android: layout height="wrap content"
       android:ems="10"
       android:hint="E-MAIL"
       android:inputType="textEmailAddress"
       tools:layout editor absoluteX="137dp"
       tools:layout_editor_absoluteY="327dp" />
```





```
android:id="@+id/editTextTime"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:ems="10"
    android:hint="TIME"
    android:inputType="time"
    tools:layout editor absoluteX="137dp"
    tools:layout editor absoluteY="223dp" />
<EditText
   android:id="@+id/editTextDate"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:ems="10"
    android:hint="DATE"
    android:inputType="date"
    tools:layout editor absoluteX="137dp"
    tools:layout editor absoluteY="412dp" />
<TextView
   android:id="@+id/textView2"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Type 1"
    tools:layout_editor absoluteX="40dp"
    tools:layout_editor_absoluteY="135dp" />
<TextView
    android:id="@+id/textView3"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Type 2"
    tools:layout editor absoluteX="40dp"
    tools:layout editor absoluteY="230dp" />
<TextView
   android:id="@+id/textView4"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:text="Type 3"
    tools:layout editor absoluteX="40dp"
    tools:layout editor absoluteY="339dp" />
<TextView
    android:id="@+id/textView5"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
```





```
android:text="Type 4"
       tools:layout editor absoluteX="40dp"
       tools:layout editor absoluteY="427dp" />
   <EditText
       android:id="@+id/editTextPhone"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:ems="10"
       android:hint="phone"
       android:inputType="phone"
       tools:layout editor absoluteX="137dp"
       tools:layout editor absoluteY="495dp" />
   <TextView
       android:id="@+id/textView6"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:text="Type 5"
       tools:layout editor absoluteX="40dp"
       tools:layout editor absoluteY="512dp" />
   <EditText
       android:id="@+id/editTextTextPassword"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:ems="10"
       android:hint="password"
       android:inputType="textPassword"
       tools:layout editor absoluteX="137dp"
       tools:layout editor absoluteY="582dp" />
   <TextView
       android:id="@+id/textView8"
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:text="Type 6"
       tools:layout_editor_absoluteX="40dp"
       tools:layout_editor_absoluteY="600dp" />
</androidx.constraintlayout.widget.ConstraintLayout>
```







3.) Read the Name, Regno, Department and college. Display "Welcome Name".

JAVA CODE:

```
package com.example.madlab1;
import androidx.appcompat.app.AppCompatActivity;
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 t1;
  Button b1;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main);
       Toast.makeText(this, "Details Page", Toast.LENGTH LONG).show();
       t1 = findViewById(R.id.T1);
       b1 = findViewById(R.id.B1);
       b1.setOnClickListener(new View.OnClickListener() {
           @Override
           public void onClick(View v) {
```



XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
   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:id="@+id/textView6"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="93dp"
       android:text="Enter The Details"
       android:textColor="@color/black"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout_constraintTop_toTopOf="parent" />
   <EditText
       android:id="@+id/T1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="56dp"
       android:ems="10" android:hint="Name"
       android:inputType="textPersonName"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toBottomOf="@+id/textView6" />
   <EditText
       android:id="@+id/editTextTextPersonName3"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="1dp"
       android:layout marginTop="25dp"
       android:ems="10"
       android:hint="RegNo"
       android:inputType="textPersonName"
```





```
app:layout constraintStart toStartOf="@+id/T1"
       app:layout constraintTop toBottomOf="@+id/T1" />
   <EditText
       android:id="@+id/editTextTextPersonName4"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="28dp"
       android:layout marginEnd="1dp"
       android:ems="10" android:hint="Department"
       android:inputType="textPersonName"
       app:layout constraintEnd toEndOf="@+id/editTextTextPersonName3"
       app:layout constraintTop toBottomOf="@+id/editTextTextPersonName3" />
   <EditText
       android:id="@+id/editTextTextPersonName5"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="27dp"
       android:ems="10"
       android:hint="College"
       android:inputType="textPersonName"
       app:layout constraintStart toStartOf="@+id/editTextTextPersonName4"
       app:layout constraintTop toBottomOf="@+id/editTextTextPersonName4" />
   <Button
       android:id="@+id/B1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="68dp"
       android:text="REGISTER"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toBottomOf="@+id/editTextTextPersonName5" />
</androidx.constraintlayout.widget.ConstraintLayout>
```







4.) Create a login page to read Userid and Password. Check for validity and display "Login Successful" or "Login Failed".

JAVA CODE:

```
package com.example.madlab1;
import androidx.appcompat.app.AppCompatActivity;
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 t1;
  Button b1;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main);
       Toast.makeText(this, "Details Page", Toast.LENGTH LONG).show();
       t1 = findViewById(R.id.T1);
       b1 = findViewById(R.id.B1);
       b1.setOnClickListener(new View.OnClickListener() {
           @Override
           public void onClick(View v) {
               Toast.makeText(getApplicationContext(), ("Welcome " +
```



```
t1.getText().toString()), Toast.LENGTH_LONG).show();
}
});
}
```

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
   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:id="@+id/textView6"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="93dp"
       android:text="Enter The Details"
       android:textColor="@color/black"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toTopOf="parent" />
   <EditText
       android:id="@+id/T1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="56dp"
       android:ems="10" android:hint="Name"
       android:inputType="textPersonName"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toBottomOf="@+id/textView6" />
   <EditText
       android:id="@+id/editTextTextPersonName3"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="ldp"
       android:layout marginTop="25dp"
       android:ems="10"
       android:hint="RegNo"
       android:inputType="textPersonName"
       app:layout constraintStart toStartOf="@+id/T1"
```





```
app:layout constraintTop toBottomOf="@+id/T1" />
   <EditText
       android:id="@+id/editTextTextPersonName4"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="28dp"
       android:layout marginEnd="1dp"
       android:ems="10" android:hint="Department"
       android:inputType="textPersonName"
       app:layout constraintEnd toEndOf="@+id/editTextTextPersonName3"
       app:layout constraintTop toBottomOf="@+id/editTextTextPersonName3" />
   <EditText
       android:id="@+id/editTextTextPersonName5"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="27dp"
       android:ems="10"
       android:hint="College"
       android:inputType="textPersonName"
       app:layout constraintStart toStartOf="@+id/editTextTextPersonName4"
       app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName4" />
   <Button
       android:id="@+id/B1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginTop="68dp"
       android: text="REGISTER"
       app:layout constraintEnd toEndOf="parent"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toBottomOf="@+id/editTextTextPersonName5" />
</androidx.constraintlayout.widget.ConstraintLayout>
 LoginApp
                  LoginApp
```



5.) Read two numbers using Text to perform ADD, SUBTRACT, MULTIPLY and DIVIDE and display the output in a Text.

JAVA CODE:

```
package com.example.madlab1;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle; import
       android.view.View; import
       android.widget.Button; import
       android.widget.EditText; import
       android.widget.TextView; import
       android.widget.Toast;
public class MainActivity extends AppCompatActivity {
  EditText t1, t2;
  Button b1, b2, b3, b4, b5;
  TextView r1; int
           n1, n2, res;
  String result;
   @Override
  protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity main);
       Toast.makeText(this, "Simple Calculator", Toast.LENGTH LONG).show();
       t1 = findViewById(R.id.T1);
       t2 = findViewById(R.id.T2);
      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);
       r1 = findViewById(R.id.R1);
       b1.setOnClickListener(new View.OnClickListener() {
           @Override
           public void onClick(View v) {
               n1 = Integer.parseInt(t1.getText().toString());
               n2 = Integer.parseInt(t2.getText().toString());
               res = n1 + n2;
               result = (r1.getText().toString() + res);
               r1.setText(result);
       });
       b2.setOnClickListener(new View.OnClickListener() {
           @Override
          public void onClick(View v) {
```



```
n1 = Integer.parseInt(t1.getText().toString());
               n2 = Integer.parseInt(t2.getText().toString());
               res = n1 - n2;
               result = (r1.getText().toString() + res);
               r1.setText(result);
           }
       });
       b3.setOnClickListener(new View.OnClickListener() {
           @Override
          public void onClick(View v) {
               n1 = Integer.parseInt(t1.getText().toString());
               n2 = Integer.parseInt(t2.getText().toString());
               res = n1 * n2;
               result = (r1.getText().toString() + res);
               r1.setText(result);
           }
       });
       b4.setOnClickListener(new View.OnClickListener() {
           @Override
          public void onClick(View v) {
               n1 = Integer.parseInt(t1.getText().toString());
               n2 = Integer.parseInt(t2.getText().toString());
               res = n1 / n2;
               result = (r1.getText().toString() + res);
               r1.setText(result);
           }
       });
       b5.setOnClickListener(new View.OnClickListener() {
           @Override
          public void onClick(View v) {
               r1.setText("RESULT: ");
       });
   }
}
XML CODE:
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
   xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout width="match parent"
   android:layout_height="match_parent"
   tools:context=".MainActivity">
   <EditText
```





```
android:id="@+id/T1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="18dp"
       android:layout marginTop="134dp"
       android:ems="10"
       android:inputType="number"
       app:layout constraintStart toEndOf="@+id/textView7"
       app:layout_constraintTop_toTopOf="parent" />
   <EditText
       android:id="@+id/T2"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="17dp"
       android:layout marginTop="47dp"
       android:ems="10"
       android:inputType="number"
       app:layout_constraintStart toEndOf="@+id/textView8"
       app:layout_constraintTop_toBottomOf="@+id/T1" />
   <TextView
       android:id="@+id/textView7"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="27dp"
       android:layout marginTop="9dp"
       android:text="Number 1:"
       android:textColor="@color/black"
       app:layout constraintStart toStartOf="parent"
       app:layout constraintTop toTopOf="@+id/T1" />
   <TextView
       android:id="@+id/textView8"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginStart="28dp" android:text="Number
2:" android:textColor="@color/black"
       app:layout constraintBaseline toBaselineOf="@+id/T2"
       app:layout constraintStart toStartOf="parent" />
   <Button
       android:id="@+id/B1"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout marginEnd="41dp"
       android: text="ADD"
       app:backgroundTint="@color/black"
       app:layout constraintEnd toStartOf="@+id/B2"
       app:layout constraintTop toTopOf="@+id/B2" />
   <Button
```



```
android:id="@+id/B2"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginTop="94dp"
    android:layout marginEnd="84dp" android:text="SUB"
    app:backgroundTint="@color/black"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toBottomOf="@+id/T2" />
<Button
    android:id="@+id/B3"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginTop="17dp" android:text="MUL"
    app:backgroundTint="@color/black"
    app:iconTint="#FFFFFF"
    app:layout constraintStart toStartOf="@+id/B1"
    app:layout constraintTop toBottomOf="@+id/B1" />
<Button
   android:id="@+id/B4"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginTop="17dp" android:text="DIV"
    app:backgroundTint="@color/black"
    app:layout constraintStart toStartOf="@+id/B2"
    app:layout_constraintTop_toBottomOf="@+id/B2" />
<TextView
    android:id="@+id/R1"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginStart="48dp"
    android:layout marginBottom="72dp"
    android:text="RESULT: "
    android:textColor="@color/black"
    android:textSize="24sp"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintStart toStartOf="parent" />
<Button
    android:id="@+id/B5"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout_marginStart="61dp"
    android:layout marginTop="21dp"
    android:layout marginEnd="61dp"
    android:text="CLEAR"
    app:backgroundTint="@color/teal 700"
    app:layout constraintEnd toEndOf="@+id/T2"
    app:layout constraintStart toStartOf="@+id/B3"
```





app:layout_constraintTop_toBottomOf="@+id/B4" />
</androidx.constraintlayout.widget.ConstraintLayout>

Calculator
Number 1: 12
Number 2: 2
ADD SUB
MUL. DIV
CLEAR
RESULT: 14
NEODET. 14