

## 1. Finds greatest among three numbers using GUI Components

### Source Code :

```
package com.example.greaternumber;

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;

public class MainActivity extends AppCompatActivity {

    Button a;
    TextView b;
    EditText c;
    EditText d;
    EditText e;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);

a=(Button) findViewById(R.id.button);

b=(TextView) findViewById(R.id.mess);


a.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View view) {

        greaterorlesser();

    }

});

}

private void greaterorlesser()

{

    c=(EditText) findViewById(R.id.a) ;

    d=(EditText) findViewById(R.id.b) ;

    e=(EditText) findViewById(R.id.c) ;

    //String a1=(c.getText().toString());

    try {

        Integer a1 = Integer.valueOf(c.getText().toString());

```

```
Integer a2 = Integer.valueOf(d.getText().toString());

Integer a3 = Integer.valueOf(e.getText().toString());

Integer high=a1;

if (high<a2) {

    high=a2;

}

if (high<a3) {

    high=a3;

}

b.setText("The Greatest number is "+high.toString());

}

catch (Exception e)

{

    b.setText("Please only enter the integer");

}

}

}
```

## XML File

```
<?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="Check"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toTopOf="parent"

    app:layout_constraintVertical_bias="0.53" />
```

```
<EditText

    android:id="@+id/c"

    android:layout_width="100dp"
```

```
android:layout_height="wrap_content"

android:layout_marginStart="250dp"

android:layout_marginTop="250dp"

android:ems="10"

android:inputType="textPersonName"

android:minHeight="48dp"

android:hint="Number 3"

app:layout_constraintBaseline_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent" />
```

<EditText

```
android:id="@+id/b"

android:layout_width="100dp"

android:layout_height="wrap_content"

android:layout_marginTop="250dp"

android:ems="10"

android:inputType="textPersonName"

android:minHeight="48dp"

android:hint="Number 2"

app:layout_constraintBaseline_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent" />
```

<EditText

```
    android:id="@+id/a"
    android:layout_width="100dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="-250dp"
    android:layout_marginTop="250dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:minHeight="48dp"
    android:hint="Number 1"
    app:layout_constraintBaseline_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

<TextView

```
    android:id="@+id/mess"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="100dp"
    android:text=""
    app:layout_constraintBaseline_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
    android:id="@+id/textView2"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="A"
```

```
    app:layout_constraintBaseline_toBottomOf="parent"
```

```
    app:layout_constraintBottom_toTopOf="@+id/a"
```

```
    app:layout_constraintEnd_toEndOf="parent"
```

```
    app:layout_constraintHorizontal_bias="0.15"
```

```
    app:layout_constraintStart_toStartOf="parent"
```

```
    app:layout_constraintTop_toTopOf="parent"
```

```
    app:layout_constraintVertical_bias="1.0" />
```

```
<TextView
```

```
    android:id="@+id/textView3"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="B"
```

```
    app:layout_constraintBaseline_toBottomOf="parent"
```

```
    app:layout_constraintBottom_toTopOf="@+id/b"
```

```
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.45"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="1.0" />
```

```
<TextView
```

```
    android:id="@+id/textView4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="32dp"
    android:layout_marginTop="220dp"
    android:text="C"
```

```
app:layout_constraintBaseline_toBottomOf="parent"
app:layout_constraintBottom_toTopOf="@+id/c"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.76"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.95" />
```

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