**1. Hello world**

**MainActivity.java**

package com.example.myapplication1;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

}

**Activity\_main.xml**

<?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\_constraintHorizontal\_bias="0.541"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.512" />

</androidx.constraintlayout.widget.ConstraintLayout>

**2. Toast**

**MainActivity.java**

package com.example.toast\_imr;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btn=findViewById(R.id.button);

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Toast.makeText(MainActivity.this, "Welcome to Imr",

Toast.LENGTH\_SHORT).show();

}

});

}

}

**2**

package com.example.toast;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

private Toast toast;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

toast = Toast.makeText(this,"this is toast",Toast.LENGTH\_SHORT);

Thread t = new Thread(new Runnable() {

@Override

public void run() {

for (int i=0;i<1000;i++)

{

try {

Thread.sleep(1000);

toast.show();

Thread.sleep(1000);

}catch (InterruptedException e){

e.printStackTrace();

}

}

}

});

t.start();

}

}

**Activity\_main.xml**

<?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="Button"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**3. Resources**

**MainActivity.java**

package com.example.resources;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

}

//constraint, linear and relative and table , relative and table directly type

**Activity\_main.xml**

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

<TableLayout 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!"

android:textColor="#ED2626"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.526"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.313" />

<TextView

android:id="@+id/textView3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

android:textColor="#684242"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.588" />

<TextView

android:id="@+id/textView4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

android:textColor="#9107A8"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.526"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.313" />

<TextView

android:id="@+id/textView5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

android:textColor="#2196F3"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.748" />

<TextView

android:id="@+id/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\_constraintHorizontal\_bias="0.583"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.448" />

</TableLayout >

**Themes.xml**

<resources xmlns:tools="http://schemas.android.com/tools">

<!-- Base application theme. -->

<style name="Base.Theme.Resources" parent="Theme.Material3.DayNight.NoActionBar">

<!-- Customize your light theme here. -->

<!-- <item name="colorPrimary">@color/my\_light\_primary</item> -->

</style>

<style name="Theme.Resources" parent="Base.Theme.Resources" />

</resources>

**4. 2 layout**

**MainActivity.java**

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

TextView tt;

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

tt = (TextView) findViewById(R.id.textView);

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

btn.setOnClickListener(new View.OnClickListener(){

public void onClick(View view){

tt.setText("IMR");

Toast.makeText(MainActivity.this, "Successful",

Toast.LENGTH\_SHORT).show();

}

});

}

}

//constraint, linear and relative and table , relative and table directly type

**Activity\_main.xml**

<?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:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Welcome"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.186" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Click here"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.352" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Themes.xml**

<resources xmlns:tools="http://schemas.android.com/tools">

<!-- Base application theme. -->

<style name="Base.TextAppearance.AppCompat.Body2.MyApplication3"

parent="Theme.AppCompat.DayNight.DarkActionBar">

<!-- This is theme -->

<!-- <item name="colorPrimary">@color/my\_light\_primary</item> -->

</style>

<style name="Theme.MyApplication"

parent="Base.TextAppearance.AppCompat.Body2.MyApplication3" />

</resources>

**5. Event Handling**

**MainActivity.java**

package com.example.onclickevent;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

TextView tt;

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

tt = (TextView) findViewById(R.id .textView);

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

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

tt.setText("IMR");

Toast.makeText(MainActivity.this, "Successful!!",

Toast.LENGTH\_SHORT).show();

}

});

}

}

**Activity\_main.xml**

<?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:id="@+id/textView"

android:layout\_width="88dp"

android:layout\_height="40dp"

android:text="Welcome"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.503"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.265" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Click here"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Themes.xml**

<resources xmlns:tools="http://schemas.android.com/tools">

<!-- Base application theme. -->

<style name="Base.Theme.OnClickevent" parent="Theme.Design.Light.NoActionBar">

<!-- Customize your light theme here. -->

<!-- <item name="colorPrimary">@color/my\_light\_primary</item> -->

</style>

<style name="Theme.OnClickevent" parent="Base.Theme.OnClickevent" />

</resources>

**6. Arithmetic**

**MainActivity.java**

package com.example.arithmeticoperators;

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 {

private EditText ee1,ee2;

private Button btn1,btn2,btn3,btn4;

private TextView result;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ee1=(EditText)findViewById(R.id.editTextText1);

ee2=(EditText)findViewById(R.id.editTextText2);

btn1=(Button) findViewById(R.id.button1);

btn2=(Button) findViewById(R.id.button2);

btn3=(Button) findViewById(R.id.button3);

btn4=(Button) findViewById(R.id.button4);

result=(TextView) findViewById(R.id.textView1);

btn1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int num1 =Integer.parseInt(ee1.getText().toString());

int num2 =Integer.parseInt(ee2.getText().toString());

int sum = num1 + num2;

result.setText("Answer " +String.valueOf(sum));

}

});

btn2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int num1 =Integer.parseInt(ee1.getText().toString());

int num2 =Integer.parseInt(ee2.getText().toString());

int sum = num1 - num2;

result.setText("Answer " +String.valueOf(sum));

}

});

btn3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int num1 =Integer.parseInt(ee1.getText().toString());

int num2 =Integer.parseInt(ee2.getText().toString());

int sum = num1 \* num2;

result.setText("Answer " +String.valueOf(sum));

}

});

btn4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int num1 =Integer.parseInt(ee1.getText().toString());

int num2 =Integer.parseInt(ee2.getText().toString());

int sum = num1 / num2;

result.setText("Answer " +String.valueOf(sum));

}

});

}

}

**Activity\_main.xml**

<?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:id="@+id/textView4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="enter the first number : "

android:textColor="#FF2525"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.186"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.075" />

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="answer : "

android:textColor="#F44336"

android:textSize="24sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.473"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.792" />

<EditText

android:id="@+id/editTextText1"

android:layout\_width="108dp"

android:layout\_height="37dp"

android:ems="10"

android:inputType="text"

android:textColor="#B32323"

android:textColorHighlight="#9F9A9A"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.808"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.077" />

<EditText

android:id="@+id/editTextText2"

android:layout\_width="119dp"

android:layout\_height="33dp"

android:ems="10"

android:inputType="text"

android:textColor="#D61C1C"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.839"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.164" />

<Button

android:id="@+id/button1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="addition"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.352" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="substraction "

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.453" />

<Button

android:id="@+id/button3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="multiplication "

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.487"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.563" />

<Button

android:id="@+id/button4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="division"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.495"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.669" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="enter the first number : "

android:textColor="#FF2525"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.186"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.075" />

<TextView

android:id="@+id/textView3"

android:layout\_width="229dp"

android:layout\_height="27dp"

android:text="enter the second number : "

android:textColor="#FF2525"

android:textSize="18sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.087"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.163" />

</androidx.constraintlayout.widget.ConstraintLayout>

**7. Login**

**MainActivity.java**

package com.example.myapplication;

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 uname,password;

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

uname = findViewById(R.id.editTextText);

password = findViewById(R.id.editTextText2);

btn = findViewById(R.id.button);

}

public void submit(View view){

if(uname.getText().toString().equals("User")){

if(password.getText().toString().equals("2509")){

Toast.makeText(this, "Login Sucsessfully", Toast.LENGTH\_SHORT).show();

}

else{

Toast.makeText(this, "Invalid Crediential", Toast.LENGTH\_SHORT).show();

}

}

else{

Toast.makeText(this, "Invalid Crediential", Toast.LENGTH\_SHORT).show();

}

}

}

**Activity\_main.xml**

<?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:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Login"

android:textSize="34sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.467"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.18" />

<EditText

android:id="@+id/editTextText"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:text="Username"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.323" />

<EditText

android:id="@+id/editTextText2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:text="Password"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.439" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="submit"

android:text="Submit"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.607" />

</androidx.constraintlayout.widget.ConstraintLayout>

**8. Get input form user**

**MainActivity.java**

package com.example.myapplication;

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 uname,password;

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

uname = findViewById(R.id.editTextText);

password = findViewById(R.id.editTextText2);

btn = findViewById(R.id.button);

}

public void submit(View view){

if(uname.getText().toString().equals("User")){

if(password.getText().toString().equals("2509")){

Toast.makeText(this, "Login Sucsessfully", Toast.LENGTH\_SHORT).show();

}

else{

Toast.makeText(this, "Invalid Crediential", Toast.LENGTH\_SHORT).show();

}

}

else{

Toast.makeText(this, "Invalid Crediential", Toast.LENGTH\_SHORT).show();

}

}

}

**Activity\_main.xml**

<?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:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Login"

android:textSize="34sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.467"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.18" />

<EditText

android:id="@+id/editTextText"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:text="Username"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.323" />

<EditText

android:id="@+id/editTextText2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:text="Password"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.439" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="submit"

android:text="Submit"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.607" />

</androidx.constraintlayout.widget.ConstraintLayout>

**9. Three shapes**

**MainActivity.java**

package com.example.threeshapes;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(new paintview(this));

}

}

**Paintview.java**

package com.example.threeshapes;

import android.content.Context;

import android.graphics.Canvas;

import android.graphics.Color;

import android.graphics.Paint;

import android.view.View;

public class paintview extends View {

private Paint myPaint;

private int viewheight,viewwidth;

public paintview(Context context) {

super(context);

myPaint=new Paint();

myPaint.setColor(Color.RED);

myPaint.setAntiAlias(true);

myPaint.setStyle(Paint.Style.FILL);

}

protected void onSizedChanged(int w,int h,int oldw,int oldh){

super.onSizeChanged(w, h, oldw, oldh);

viewwidth=w;

viewheight=h;

super.onSizeChanged(w, h, oldw, oldh);

}

protected void onDraw(Canvas canvas){

super.onDraw(canvas);

canvas.drawColor(Color.LTGRAY);

canvas.drawRect(600,600,1000,1000,myPaint);

canvas.drawCircle(300,300,200,myPaint);

canvas.drawLine(500,1200,500,500,myPaint);

myPaint.setColor(Color.RED);

myPaint.setStyle(Paint.Style.STROKE);

myPaint.setStrokeWidth(10);

}

}

**activity\_main.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"

xmlns:app="http://schemas.android.com/apk/res-auto"

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\_constraintStart\_toStartOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</RelativeLayout>

**10.Three Checkbox**

**MainActivity.java**

package com.example.threecheckbox;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.CheckBox;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

CheckBox Play,Read,Listen;

TextView T;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Play = findViewById(R.id.checkBox);

Read = findViewById(R.id.checkBox2);

Listen = findViewById(R.id.checkBox3);

T = findViewById(R.id.textView);

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

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String str="";

if (Play.isChecked())

{

str+=""+Play.getText();

}

if (Read.isChecked())

{

str+=""+Read.getText();

}

if (Listen.isChecked())

{

str+=""+Listen.getText();

}

Toast.makeText(MainActivity.this,str,Toast.LENGTH\_SHORT).show();

T.setText("Answer:-"+String.valueOf(str));

}

});

}

}

**activity\_main.xml**

<?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">

<CheckBox

android:id="@+id/checkBox"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Playing"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.27" />

<CheckBox

android:id="@+id/checkBox2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Reading"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.396" />

<CheckBox

android:id="@+id/checkBox3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Listening"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.519" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Show"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.663" />

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Result"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/button"

app:layout\_constraintVertical\_bias="0.246" />

</androidx.constraintlayout.widget.ConstraintLayout>

**11. Numeric**

**MainActivity.java**

package com.example.numericvalue;

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 no1,no2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

no1 = findViewById(R.id.editTextText2);

no2 = findViewById(R.id.editTextText3);

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

final TextView t = findViewById(R.id.textView2);

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

int v1 = Integer.parseInt(no1.getText().toString());

int v2 = Integer.parseInt(no2.getText().toString());

if (v1<v2){

t.setText("V1 is small");

Toast.makeText(MainActivity.this,"no is small"+v1,Toast.LENGTH\_SHORT).show();

}

else {

t.setText("v1 is Greater");

Toast.makeText(MainActivity.this,"no is greater"+v2,Toast.LENGTH\_SHORT).show();

}

}

});

}

}

**activity\_main.xml**

<?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">

<EditText

android:id="@+id/editTextText2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:hint="Enter No 1"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.179" />

<EditText

android:id="@+id/editTextText3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="text"

android:hint="Enter No 2"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/editTextText2"

app:layout\_constraintVertical\_bias="0.1" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Calculate"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/editTextText3"

app:layout\_constraintVertical\_bias="0.181" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="TextView"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/button"

app:layout\_constraintVertical\_bias="0.312" />

</androidx.constraintlayout.widget.ConstraintLayout>

**12. AlertDialougeBox**

**MainActivity.java**

package com.example.intents;

import androidx.appcompat.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

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

builder.setMessage("Welcome to nmu");

builder.show();

}

}