

### LAB ASSIGNMENT

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Course Code: OMC308 Last Date of Submission: 31/12/24

Course Title: Mobile Application Development Laboratory Maximum Marks: 30

#### Program 1

Create an Android application that displays the message: "Welcome to Graphic Era University MCA" on the screen.

```
Practical 01: Display static Message

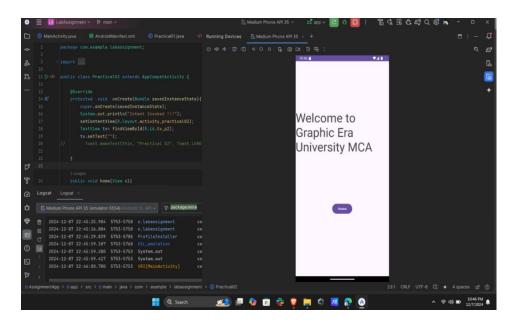
Public class Practiculos extenda App Compat Activity & Lourse: MCA

Subject: Android

Protected void confronte (Bundle Saved Instance State) &

Super. On Proate (source Instance State);

Set Content View (R. Layout. practical O1);
```



Practical 01



#### **Program 2**

Create an Android application that displays the message: "Welcome to Graphic Era University - MCA" when a button is clicked.

```
Proctical 02: Display Message on Button Click

Public class Practical 02 extends Applampotectivity?

Ocurride

protected boid on Procte (Bundle b)?

Outpur on Procted (b);

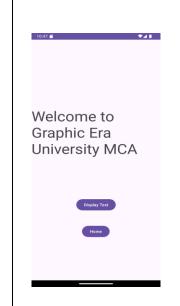
Outpur on Proctical -02);

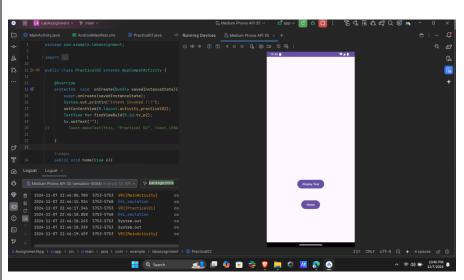
Public wold display Message (View 9)?

Text View to = Lind Wessage (R. id. tr);

to out Tort ("Welcome to Graphic Proclimatority MCA");

}
```





Practical 02



### **Program 3**

Create an Android application to display the message: "Welcome to GEU - learning Android Application Development - MCA" and execute the application using different emulators.

```
Practical 03; Mossage con different Emulatora

public class Practicalo3 extends Applompat Activity &

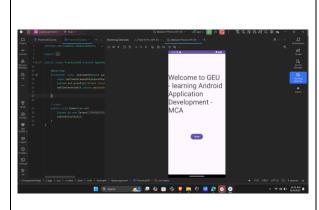
@ Oweride

protected void anticate (Bundle &) &

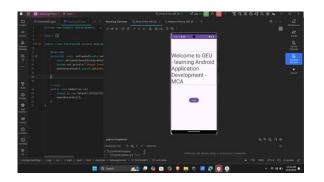
ouper. ontreate (&);

excellantent View (R. Layout practical 03);

}
```



Medium Phone API



Pixel 6 Pro



#### **Program 4**

Illustrate with a suitable example the use of **Toast** to display a message in an Android application.

[The message display should wait for a long time]

```
Practical 04: Toast Message

Public class Practical04 extends Applampat Activity?

(Quoveride protected usid on Resate (Bundle b)?

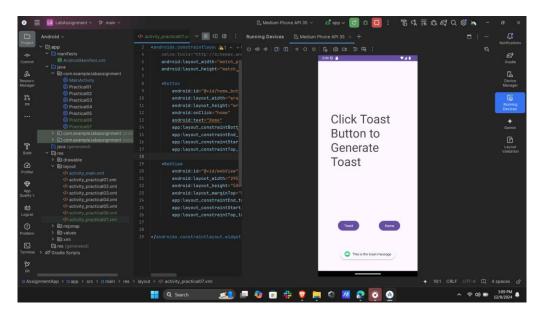
Super on Create (b);

Set Content Vion (R Jayout Activity practical 04);

Public usid toast (vion 4)?

Toast make Text (this, "Tris is a teast message".

Toast LENGTH LONG) serrous();
```



Practical 04



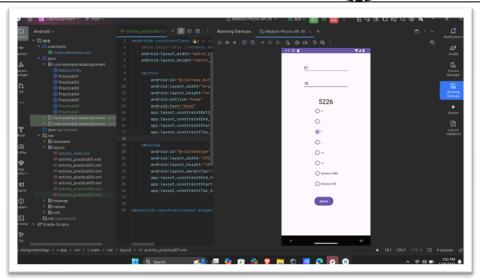
### Program 5

Create an Android application for designing a simple calculator with the following basic functionalities: Addition Subtraction , Multiplication, Division

Use controls like **Buttons**, **TextViews**, and **EditTexts**.

```
Bractical 05: Dimple talculator
     Public class Practical 05 extends Applampat Actualty ?
             100.000 months
Occorride Text view +; EditText 11, 12; Radio Butlon 21, 22, 23, 24;
            2 (d. elbanua) etacrona biae biae botatara
                    Duper, on Create (b), pool Content Vion (R. Layout. activity practical 05)
                    = find Win By Id (R. id, to);
                   t1 = Jind View By Id (R. Ld. t1); t2 = Jind Vew By Id (R. Ld. t2);
                   r1 = find liew By Id (R. id. r1); r3 = find liew By Id (R. id. 25);
r2 = find liew By Id (R. id. r2); r4 = find liew By Id (R. id. r4);
                    Buttom b = find kiew By Id (R. id. b);
                    2 () ronotail sierno. wie war) ronotail siernot () s
                      (a) Orienzide
                       public word on click (View ) {
                          unt num1 = Integer. parseInt (e1. get Text(). toString ());
unt num2 = Integer. parseInt (e2. get Text(). to String ());
Uring a = "";
                        St (301. La Chocked) ) De = Integer. to String (nums + num 2).
                 else If (312. is Checked()) &= Integer, to String (num1-num2);
oksely (913. to Checked()) &= Integer, to String (num1 * num2).
                  else s= Integer. to othing (num1/num2).
                 +, outText (00); }});
```





### **Program 6**

Illustrate with a suitable example the use of **Intents** for linking activities. [At least two activities should be used]

```
Practical 06: Moing Intents do Link detivities

Public class Practical06 extends Appliampathetivity {

@ Ownride

protected looid onCreate (Bundle b) {

wuper. an Create (b);

art Combent View (R. Layout. practical_06);

}

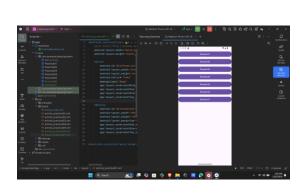
public world hame (View +) {

Intent i = mener Intent (this, Maindetivity. class);

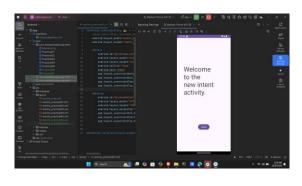
wtart Activity (i);

}
```





Main Activity



Intent Activity

#### **Program 7**

Illustrate with a suitable example the use of **Intents** for navigating to a website. [Navigate to Graphic Era University Website]

```
Practical 07: Maing Intenta to rawigate to a website

public class Practical 07 extends Applicmpatheticity?

(a) Override

protected void entreate (Bundle I)?

overflow on Treate (I);

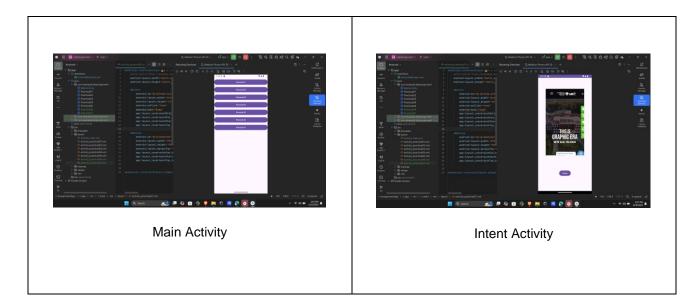
overflow the final New By Id (R. Id., ver);

Web-liew we = final New By Id (R. Id., ver);

were get Lettings (). sort Javascript Enabled (true);

were load (Ird ("https://geu. ac.im");
```





.-----

### **Program 8**

Create an Android application that demonstrates the use of **Relative Layout** in Android by using appropriate views to create a login form.

```
Protical 07: Login lage woing Relative layout

public class bractical 08 extends Applicampatheticity?

@ Ownide

protected vaid on Create (Bundle it)?

couper on Create (it);

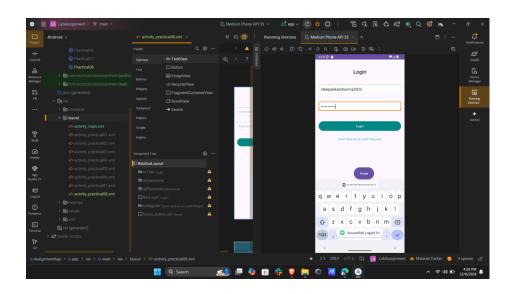
sort Content View (R. Layout. activity practical 02);

}
```



```
IMX
                                                                                      可提(
                                                                                      m.
< Relation Layout >
                                                                                      CO.
     < Text/lian android: id = "Q+id/to"

A rest width =
               android: layout width = "wrap content"
                                                                                      TEL
               landroid: layout height = "wrap content" android: text = "login"/>
                                                                                      100
                                                                                      100
    < Edit Text
                 android: id = " D+id/et1"
                 android: dayout width = " weap content"
                 android: doyout height = "wrop contant"
                "ett bi @" = wabet telau : biarbaa" oarbaa! : biarbaa
                                                                                      1
       < Edit Text
                  andraid: id = "@+id/et2"
                   condraid dayout windth = "weap content"
                   andraid: layout_hoght = " wrap_content" vardraid: layout_below = " @+id/et1"
                   candraid: bunt = " passurord"/>
          < Button
                    andeold: 2d = "@+ 2d/b"
                   android: layout width = "verop content"
                    vardraid: layout height = "wrap content"
                    randraid: layout below = "@+id/d2"
                    / 'migal" = trut; bloodona
  </relative Layout>
```

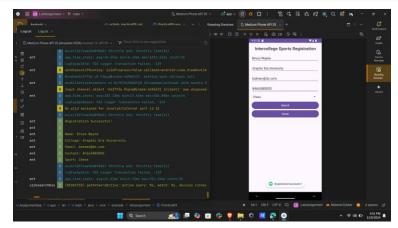




#### **Program 9**

Create an Android application that demonstrates the use of appropriate layouts and views to create a Registration Form [For intercollege sports events] and display the message: "Registration is successful" on the click of a Submit button.

```
Tack 09 : Registration form
Rublic class Practical 09 extends Appliampat Activity &
        @ Override
         protected word contracte (Bundle is) &
                  , (d) starilar. on breate
                  ext Contest them (R. Layout activity postical 09),
                  Eduteret et Name = Jing Wew By Id (R. id. name);
                 Editert etletige= findlieusytd (Rid . college);
Editert etemail = findlieus Bytd (Rid . email);
                 Editext etContact=findViewById(R. Ed. contact);
                 Button & = find han By Id (R. id . b);
Aprimer & = find han By Id (R. id .s);
Array Adapter < Char Sequence > adapter = Array Adapter.
                  create From Resource (this, R. array sports array,
                 vandrald R. Jayaut . simple spinner item); vadapter . set Broplouen View Rosource (randraid . R. Jayout .
                                               se imple spinner dropdouen item);
                  opinner a pot Adapter (vadapter);
                 it. set Onclick Listener (new View. Onclick Listener (15
                    @ Override
                    S ( v well) stiller and blow ville
                        string name = et Name gutText () to string ();
                       string college = et (ollege get Text() to string ();
                       dring email = et Email gettext() . to atring();
                        Othing aport = etspiriner gettent() to atring;
                          stiles ni mass at upol 1 :
                        Toast maketext ( Practical 09. thise, "Regustration Success!"
                                            Todad LENGTH_LONG), sahow ();
              3);
```





#### **Program 10**

Illustrate with a suitable example the use of graphics for displaying the following shapes:

1. Circle 2. Triangle 3. Rectangle

```
Practical 010 : Carneal
Pulsie class whose View extends View &
        private Paint paint;
        Public Shapelliew ( Context context, Attributesset outra) }
                 souper (context, attra);
                 paint = new paint ();
                 point. set Anti Alias (true);
   @ Override
    Protected ward on Draw ( canvos c) ?
           ouper contraw (a); Lanvas canvos = e;
            paint act Color ( blue);
            canaa, draw Circle (200, 200, 400, paint);
            paint. sot Color (green);
            canvas. drawkect (50,350,350,550, paint);
            paint. set Color ( red );
             Pout p = now Path ();
             p. moueto (600, 350);
                p. lineto (500,550);
                p. Lineto (700, 550);
                p. close ();
              c. drawfath (p, paint);
```

