

Day - 1

Please Change your names in the below format :

ROLL NUMBER - YOUR NAME - COLLEGE NAME

Os - Windows 32/64 bit,Mac,Linux,ChromeBook

Hard disk - 50gb - 100gb

Ram - 4Gb (8gb)

Why Android ?

Day-2 :

Java :

OOP Concept:

Polymorphism : One form to multiple forms(overriding/overloading)

Inheritance : Inheriting the parent properties to child(extends/Implements)

Single Inheritance

Multilevel Inheritance

Multiple Inheritance

Hybrid

Hierarchical

Encapsulation : Wrapping of the code(Model Classes)

Abstraction : Hide the code(Abstract Class)

```
Class a(){  
}
```

```
Class b extends class a(){  
}
```

```
Class c extends class b implements a(){  
}
```

JDK = Java Development Kit(Libraries,Monitors and Debuggers)

JVM = Java Virtual Machine

JRE = Java Runtime Environment

Import java.io.util.*

Error and Bug

Data Types :

String

Int

Char

Float

Double

Int i;

i==0

String s;

s.equals()

if(n%4==0) || (n%400==0 && n%100!=0)

if(n%4==0) | (n%400==0 & n%100!=0)

Get,put,set

/* */

```
//  
Import Java.util.Scanner  
Scanner input = new Scanner(System.in)  
Int number = input.nextInt();
```

Return - If the output of one method is going to be the input for another.

**26-05-2021
=====**

Git ⇒ Local System

Github ⇒ Server(remote)

If you want to work with git we need to download git software

GitHub Commands :

***to know hidden files -> ls -a(this is without permission)**
-> ls -la(this is with permission)

***to know version in git -> git --version**

***to initialize folder -> git init (hidden folder created like .git)**

***to check status of file -> git status**

***to change from untracked to staging area -> git add filename or git add .**

***to change from staging area to untracked -> git rm --cached
filename**

***to change from staging to commit file -> git commit -m "commit
message"**

***to give your username global -> git config --global user.name
"name"**

***to give your useremail global -> git config --global user.email
"email"**

***to give your username for specific dir -> git config user.name
"name"**

***to give your useremail for specific dir -> git config user.email
"email"**

***to get SHAkey,author name,data and commit -> git log**

***to get short description of SHAkey -> git log --oneline**

***to change the head-master to another file -> git checkout SHAkey**

***to get back to master -> git checkout master**

***to change the commit message -> git commit --amend -m
"commit message"**

***to delete latest commit -> git reset --hard HEAD^**

***to delete number of commits -> git reset --hard
HEAD~number**

***to delete specific commit -> git rebase --onto branch
name~(number to delete) branchname~(commit to keep as head)
branchname**

***to clone -> git clone url**

***to clone and keep the filename -> git clone url filename**

***to get latest commit in clone url -> git log**

***to get initial commit in clone url -> git log --reverse**

***to count commits in url -> git rev-list HEAD --count**

***to get commits from initial to given date -> git log --until="date" or
git log --oneline --until="date" (for short description)**

***to get commits from given date to end date -> git log --since="date"
or git log --oneline --since="date" (for short description)**

***to get commits from given to given date -> git log --since="date"
--until="date" or git log --oneline --since="date" --until="date"**

***to display all remote repos -> git remote**

***to create remote -> git remote add variable name url**

***to display all variable name and urls -> git remote -v**

***to push the files to remote -> git push variable name
branchname**

***to pull the files from remote -> git pull variable name
branchname**

***to check how many branches present -> git branch**

***to create branch -> git branch new branch name**

***to go to that branch -> git checkout branch name**

***to merge branches -> git merge branch name**

***to delete a branch after merge -> git branch -d branchname**

***to delete without merge and in local -> git branch -D branchname**

***to delete without merge and in remote -> git push remote name
--delete branch name**

***to rename remote -> git remote rename
oldremotename newremotename**

***to delete remote -> git remote remove remotename**

***to create branchname and checkout -> git checkout -b
newbranchname**

27-05-2021 :

Android :

Android is invented by : Andy rubin, Rich Miner and Nick Sears

Android is initially for Cameras.

Android HTC Dream

Android Applications are Naive and Hybrid

Why : More number of users and it is open source

What : Android is an OS based on the linux kernel. Android is a platform.

Versions of Android :

A : Alpha

B : Beta

C : CupCake

D : Donut

E : Eclairs

F : Froyo

G : Ginger Bread

H : Honey Comb

I : Ice cream sandwich

J : Jelly Bean

K : Kitkat

L : Lollipop

M : Marshmallow

N : Nougat

O : Oreo

P : Pie

Q: Q

R : R

How :

Architecture Framework of Android :

Level - 1 : System/User Apps - User/Developer
Level - 2 : Java Api Framework - Developer
Level - 3 : Android Runtime & c/c++ libraries - Developer
Level - 4 : HAL(Hardware Abstraction Layer) - NA
Level - 5 : Linux Kernel - NA

DVM - Dalvik Virtual Machine

Component Blocks of Android :

Activities : Every Screen is an activity. Entry point for the user to interact.

Java and XML - Java is for Action code and XML(Extension Markup Lang) is for UI

Services : Long Running Background Task - Music Player and Alarm

Broadcast - Receivers : In-built System Calls.

Content-Provider : Sharing Single Database

Day - 6

ViewGroup - will hold all the views together

View - Any component or a widget with specified action

Layouts :

Constraint

Relative

Linear

Table,Frame,Grid

XML :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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:orientation="vertical"
  tools:context=".MainActivity">

  <Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_weight="0.5"
    android:id="@+id/toast"
    android:text="Toast"/>

  <TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/tv"
    android:text="0"
    android:layout_weight="9"
    android:textSize="150sp"
    android:gravity="center"/>

  <Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/count"
    android:layout_weight="0.5"
    android:text="count"/>

</LinearLayout>
```

Set - To assign the Data
Put - To hold the data
Get - To fetch the data

About Phone - Tap on Build number for 7 times - You are now a developer - search for developer options in the settings - after opening developer options - allow file transfer - turn on USB debugging - you will get a sha key verification on your screen - Allow it - Then By navigating into Android Studio - In the toolbar you can see the name of your mobile device - And click on the green arrow after you mobile name.

Day - 7 :

White : #FFFFFF
Black : #000000
Red : #FF0000
Green : #00FF00
Blue : #0000FF

Android, operating system for cellular telephones and tablet computers. Android began in 2003 as a project of the American technology company Android Inc to develop an operating system for digital cameras. In 2004 the project changed to become an operating system for smartphones. Android Inc was bought by the American search engine company Google Inc in 2005. At Google, the Android team decided to base their project on Linux, an open source operating system for personal computers.

**
Go straight to the stuff that matters most. Because Android 11 is optimized for how you use your phone. Giving you powerful device controls. And easier ways to manage conversations, privacy settings and so much more.</br>**

XML :

```
<?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:padding="12dp"
    android:background="#FFEB3B"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/heading"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:fontFamily="@font/aclonica"
        android:gravity="center"
        android:text="@string/head"
        android:textColor="#009688"
        android:textSize="36sp"
        android:textStyle="bold" />

    <TextView
        android:id="@+id/subhead"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/heading"
        android:layout_marginTop="15dp"
        android:fontFamily="@font/aladin"
        android:text="@string/shead"
        android:textColor="#03D8C4"
        android:textSize="27sp"
        android:textStyle="italic" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
```

```

        android:layout_below="@+id/subhead"
        android:layout_marginTop="15dp"
        android:orientation="vertical"
        android:background="@color/black">

        <TextView
            android:id="@+id/titlehead"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="@string/thead"
            android:textStyle="bold|italic"
            android:textColor="#03D8C4"
            android:textSize="24sp" />

        <ScrollView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:background="#FFFFFF"
            android:padding="6dp">

            <TextView
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:text="@string/text"
                android:id="@+id/tv"
                android:autoLink="all"
                android:textSize="24sp" />

        </ScrollView>
    </LinearLayout>

</RelativeLayout>

```

\Strings.xml :

```

<resources>
    <string name="app_name">ExampleScroll</string>
    <string name="head">Android</string>
    <string name="shead">Introduction to Android</string>
    <string name="thead">History of Android</string>

```

```
<string name="text">Android, operating system for cellular
telephones and tablet computers. Android began in 2003 as a
project of the American technology company Android Inc to
develop an operating system for digital cameras. In 2004 the
project changed to become an operating system for smartphones.
Android Inc was bought by the American search engine company
Google Inc in 2005. At Google, the Android team decided to base
their project on Linux, an open source operating system for
personal computers.
<br>Go straight to the stuff that matters most. Because Android
11 is optimized for how you use your phone. Giving you powerful
device controls. And easier ways to manage conversations,
privacy settings and so much more.</br>
<br>This is the reference from
https://developer.android.com</br>
    <br>My mail id is chaitanya.karri@apssdc.in</br>
    <br>My number is +918247253702</br>
</string>
</resources>
```

Day-8

Intents : Navigating from one screen to another screen

Implicit Intent : Switching between 2 screens in different applications.

Explicit Intent : switching between 2 screens in the same application.

XML :

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

```
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"  
android:padding="14dp"  
android:gravity="center"  
tools:context=".MainActivity">
```

```
<EditText
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:id="@+id/name"  
    android:hint="Enter Name"/>
```

```
<Button
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:text="Next"  
    android:layout_marginTop="15dp"  
    android:onClick="next"/>
```

```
<EditText
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:id="@+id/number"  
    android:hint="Enter Number"  
    android:layout_marginTop="15dp"/>
```

```
<Button
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:text="Dial"  
    android:layout_marginTop="15dp"  
    android:onClick="dial"/>
```

```
<EditText
```

```
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Link"
        android:id="@+id/link"
        android:layout_marginTop="15dp"/>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Search"
    android:layout_marginTop="15dp"
    android:onClick="search"/>
</LinearLayout>
```

Day - 9:

Activity Life Cycle :

Each and Every screen will have the same lifecycle

7 Phases :

- 1. Create**
- 2. Start**
- 3. Resume**
- 4. Pause**
- 5. Stop**
- 6. Restart**
- 7. Destroy**

Refresh rate of android screen is 16ms(1 sec = 1000 ms)

Stop - Restart - Start - Resume

Destroy - Create - Start - Resume

```
Public void chaitu(){  
System.out.print("Welcome")  
}
```

Main.java

```
@Override  
protected void onStart() {  
    super.onStart();  
    Log.i("APSSDC","First Activity Started");  
}  
  
@Override  
protected void onResume() {  
    super.onResume();  
    Log.i("APSSDC","First Activity Resumed");  
}  
  
@Override  
protected void onPause() {  
    super.onPause();  
    Log.i("APSSDC","First Activity Paused");  
}  
  
@Override  
protected void onStop() {  
    super.onStop();  
    Log.i("APSSDC","First Activity Stopped");  
}  
  
@Override  
protected void onRestart() {
```



```

    super.onRestart();
    Log.i("APSSDC", "First Activity Restarted");
}

@Override
protected void onDestroy() {
    super.onDestroy();
    Log.i("APSSDC", "First Activity Destroyed");
}

```

Xml :

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    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:orientation="vertical"
    android:padding="13dp"
    android:gravity="center"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:fontFamily="@font/aclonica"
        android:gravity="center"
        android:text="Registration Form"
        android:textSize="30sp" />

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/name"
        android:hint="Enter Name"
        android:layout_marginTop="15dp"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/email"
        android:hint="Enter Email"

```

```
        android:inputType="textEmailAddress"
        android:layout_marginTop="15dp"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/pass"
    android:hint="Enter Password"
    android:inputType="textPassword"
    android:layout_marginTop="15dp"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/number"
    android:hint="Enter Number"
    android:inputType="phone"
    android:layout_marginTop="15dp"/>
<Spinner
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/sp"
    android:layout_marginTop="15dp"/>
<RadioGroup
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginTop="15dp"
    android:id="@+id/rg">
    <RadioButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:id="@+id/male"
        android:text="Male"/>
    <RadioButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:id="@+id/female"
        android:text="Female"/>
</RadioGroup>
<CheckBox
```

```

        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Telugu"
        android:id="@+id/tel"
        android:layout_marginTop="15dp"/>
<CheckBox
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Hindi"
    android:id="@+id/hin"
    android:layout_marginTop="9dp"/>

<CheckBox
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="English"
    android:id="@+id/eng"
    android:layout_marginTop="9dp"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    android:id="@+id/dob"
    android:text="Click here to add DOB"
    android:gravity="center"/>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:onClick="save"
    android:text="submit"
    android:layout_marginTop="15dp"/>

</LinearLayout>

```

Strings.xml :

```

<string-array name="branch">
    <item>- - - -Select Your branch- - - -</item>
    <item>CSE</item>
    <item>ECE</item>

```

```

    <item>IT</item>
    <item>EEE</item>
    <item>CIVIL</item>
    <item>MECH</item>
</string-array>

```

Day-10 :

Shape.XML :

```

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

    <stroke android:color="@color/teal_200"
        android:width="1dp"/>

    <!-- <solid android:color="@color/teal_200"/>-->

    <corners android:radius="15dp"/>

    <!-- <gradient android:endColor="#05C1D9"
        android:startColor="#D80A50"
        android:centerColor="@color/white"
        android:angle="270"/>-->

</shape>

```

Main.XML:

```

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

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="13dp"
    android:gravity="center"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:fontFamily="@font/aclonica"

```

```

        android:gravity="center"
        android:textColor="@color/teal_200"
        android:text="Registration Form"
        android:textSize="30sp" />
<EditText
    android:layout_width="match_parent"
    android:layout_height="45dp"
    android:id="@+id/name"
    android:padding="12dp"
    android:drawablePadding="20dp"
    android:drawableLeft="@drawable/ic_person"
    android:hint="Enter Name"
    android:background="@drawable/shape"
    android:layout_marginTop="15dp"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="45dp"
    android:background="@drawable/shape"
    android:drawableLeft="@drawable/ic_mail"
    android:padding="12dp"
    android:drawablePadding="20dp"
    android:id="@+id/email"
    android:hint="Enter Email"
    android:inputType="textEmailAddress"
    android:layout_marginTop="15dp"/>
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    app:passwordToggleEnabled="true"
    app:boxStrokeWidth="0dp"
    app:startIconDrawable="@drawable/ic_pass"
    app:startIconTint="#E20F0F"
    >
<EditText
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/shape"
    android:padding="6dp"
    android:drawablePadding="6dp"
    android:id="@+id/pass"
    android:hint="Enter Password"
    android:inputType="textPassword"
    />
</com.google.android.material.textfield.TextInputLayout>
<EditText
    android:layout_width="match_parent"
    android:layout_height="45dp"
    android:background="@drawable/shape"

```

```

        android:drawableLeft="@drawable/ic_phone"
        android:padding="12dp"
        android:drawablePadding="20dp"
        android:id="@+id/number"
        android:hint="Enter Number"
        android:inputType="phone"
        android:layout_marginTop="15dp"/>
<Spinner
    android:layout_width="match_parent"
    android:layout_height="45dp"
    android:id="@+id/sp"
    android:background="@drawable/shape"
    android:entries="@array/branch"
    android:textAlignment="center"
    android:layout_marginTop="15dp"/>
<RadioGroup
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout_marginTop="15dp"
    android:background="@drawable/shape"
    android:id="@+id/rg">
    <RadioButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:id="@+id/male"
        android:buttonTint="@color/teal_200"
        android:text="Male"/>
    <RadioButton
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:buttonTint="@color/teal_200"
        android:id="@+id/female"
        android:text="Female"/>
</RadioGroup>
<CheckBox
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Telugu"
    android:id="@+id/tel"
    android:buttonTint="@color/teal_200"
    android:layout_marginTop="15dp"/>
<CheckBox
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Hindi"
    android:buttonTint="@color/teal_200"

```

```

        android:id="@+id/hin"
        android:layout_marginTop="9dp"/>

<CheckBox
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="English"
    android:buttonTint="@color/teal_200"
    android:id="@+id/eng"
    android:layout_marginTop="9dp"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="15dp"
    android:id="@+id/dob"
    android:text="Click here to add DOB"
    android:gravity="center"/>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:onClick="save"
    android:text="Submit"
    android:background="@drawable/shape"
    android:layout_marginTop="15dp"/>

</LinearLayout>
</ScrollView>

public void dob(View view) {
    Calendar c = Calendar.getInstance();
    int year = c.get(Calendar.YEAR);
    int mnth = c.get(Calendar.MONTH);
    int day = c.get(Calendar.DAY_OF_MONTH);
    DatePickerDialog dpd = new DatePickerDialog(this,
        new DatePickerDialog.OnDateSetListener() {
            @Override
            public void onDateSet(DatePicker view, int year,
int month, int dayOfMonth) {

dob.setText(dayOfMonth+"/"+(month+1)+"/"+year);
            }
        },year,mnth,day);
    dpd.show();
}

```

Day - 12:

```
<?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:layout_marginTop="232dp"
        android:onClick="alert"
        android:text="Alert"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/time"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="time"
        android:text="Get the Time"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button" />

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


DAY - 15 :

implementation `"com.squareup.retrofit2:converter-scalars:2.9.0"`

implementation `"com.squareup.retrofit2:retrofit:2.9.0"`

Retrofit

API

JSON Formatting and JSON Parsing

JSON : { - Object

[- array

“” : “” - key value pair

JSON - Javascript Object Notation

Oneplus - Hike - filemanager - hike - media - pictures - profile pictures - dp.jpg

Oneplus

Nokia

Mi

Gmail

Youtube

Filemanager

Whatsapp

Telegram

Hike

Media

Docs

Files

Pictures

Videos

Audios

Profilepics dp.jpg

Downpics

Sentpics

Xml :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
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:orientation="vertical"
    android:padding="14dp"
    android:gravity="center"
    tools:context=".MainActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <EditText
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/country"
            android:hint="Enter Country Name"
            android:layout_weight="4"/>

        <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:onClick="search"
            android:layout_weight="1"
            android:src="@drawable/ic_search"
            android:background="@null"/>

    </LinearLayout>
    <TextView
        android:layout_width="match_parent"
```

```

        android:layout_height="wrap_content"
        android:id="@+id/conf"
        android:textSize="27sp"
        android:layout_marginTop="18dp"
        android:text="Confirmed Cases"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/act"
    android:textSize="27sp"
    android:layout_marginTop="18dp"
    android:text="Active Cases"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/rec"
    android:textSize="27sp"
    android:layout_marginTop="18dp"
    android:text="Recovered Cases"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/death"
    android:textSize="27sp"
    android:layout_marginTop="18dp"
    android:text="Death Cases"/>

</LinearLayout>

```

dayone/country/

<https://api.covid19api.com/>

```

@GET("dayone/country/{input}")
Call<String> getValue(@Path("input") String i);

```

Day - 16

Service - Long running background task
Start Service - Music player

Broadcast Receiver
- Inbuilt System Calls

Class 17 :

`implementation 'androidx.work:work-runtime:2.3.4'`

Workmanager

Deferrable but guaranteed

Success

Failed

Retry

Class - 21 :

`implementation "androidx.room:room-runtime:2.2.5"`

annotationProcessor
"androidx.room:room-compiler:2.2.5"
testImplementation
"androidx.room:room-testing:2.2.5"

implementation
"androidx.lifecycle:lifecycle-extensions:2.2.0"
annotationProcessor
"androidx.lifecycle:lifecycle-compiler:2.2.0"

Emplid	Salary	Name
A1	50k	Alpha
B1	1 lakh	Beta

Day-22 :

XML :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:padding="12dp"
    tools:context=".MainActivity">

    <EditText
        android:layout_width="match_parent"
```

```

        android:layout_height="wrap_content"
        android:id="@+id/roll"
        android:hint="Enter Roll Number"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/name"
    android:layout_marginTop="15dp"
    android:hint="Enter Name"/>
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/phone"
    android:layout_marginTop="15dp"
    android:hint="Enter Number"/>
<Button
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="save"
    android:onClick="save"
    android:layout_marginTop="15dp"/>

</LinearLayout>

```

Recyclerview :

1. Declare the Rv in the Main xml .
2. Declare and Initialize the RV in Main Activity
3. Create a row.xml file for each and every item in the rv.
4. Create an Adapter class to hold, process and display the data.

5. Connect the Adapter Class with the Main Class.

6. Add Layoutmanager to the RV.

7.

Row.XML :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="horizontal"
    android:layout_width="match_parent"
    android:padding="6dp"
    android:layout_height="wrap_content">

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout_weight="4"
        android:orientation="vertical">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Roll"
            android:textSize="21sp"
            android:id="@+id/roll"/>
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Name"
            android:textSize="21sp"
            android:id="@+id/name"/>
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Number"
            android:textSize="21sp"
            android:id="@+id/number"/>
    </LinearLayout>
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout_weight="1"
```

```

        android:gravity="center"
        android:orientation="vertical">
        <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/update"
            android:src="@drawable/ic_edit"
            android:background="@null"
            android:layout_weight="1"/>
        <ImageButton
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/delete"
            android:src="@drawable/ic_del"
            android:background="@null"
            android:layout_weight="1"/>

    </LinearLayout>

</LinearLayout>

```

Authentication : Register,Login and Reset
Firestore database : Text type
Firestore Storage : File Type (docs,images,pdfs)

Crashlytics :

Test Lab :

ML :

FCM : Firebase Cloud Messaging

In App Messaging :

Firestore Database :

**AU : Btech Mtech Ms - CSE Mech ECE - A B C - Roll number-
 Fee REsults Attendance**

Hosting :

Cloud Functions :

Admob

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



```
<LinearLayout
    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=".RegisterActivity"
    android:padding="14dp"
    android:gravity="center"
    android:orientation="vertical">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Register"
        android:textStyle="bold"
        android:textSize="30sp"
        android:gravity="center"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/rmail"
        android:layout_marginTop="15dp"
        android:hint="Enter Email"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/rpass"
        android:layout_marginTop="15dp"
        android:hint="Enter Password"
        android:inputType="textPassword"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/rrepass"
        android:layout_marginTop="15dp"
        android:hint="Re-Enter Password"
        android:inputType="textPassword"/>

    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="register"
        android:onClick="signup"
        android:layout_marginTop="15dp"/>

</LinearLayout>
```

