

Prg-1

1. Creating Hello World Application

Open Android Studio



file → New → New Project → Empty
viewer activity → finish



Code will be autogenerated



connect to the pixel



Once the pixel is connected, in the
top of the screen, click on play button
execution starts.

Connecting Pixel

right corner of the screen, click on
device manager → list of pixels present
on System will be shown → Select any
one and click on play button

Once it is connected, running device
start to appear on screen.

Prg-2

2. Screen Orientation

Open Android Studio



New → New Project → Empty Viewer Activity
Code will be autogenerated



Change the import packages



after return prints, add the xml file
design code.



Go to xml file, click on Hello world
and change of that to lid
and then change of text of Hello
world to orientation



Connecting to pixel and execution

Prg-3

Login Window

Same as Hello World, Code will be autogenerated.

- Open xml file, Click on hello world and delete
- In the palette, drag & drop 4 plain text and 1 button
- Then connect constraints.
 1. always connect top element to lower
 2. always connect right ones to left
 3. Second right → button
- Change text of each element
 1. first R → Username
 2. first L → empty blank
 3. Second R → Password
 4. Second L → empty blank
 5. Button → Login
- No change in Java file

↓

Connect to pixel & execute

Prg-4

Login application with message

Same, Create new Project

- Open java file change the import package . o

↓

Also change the design code in java file after return insert(); statement

↓

Then in xml file, delete helloworld and drag and drop two plain texts and one button

↓

Connect constraints, Same way

- 1. upper ones to lower ones always

↓

Then connecting constraints, click on first plain text and change its id to usr and edit text to "empty blank"

↓

Then same way do. Second plain text, change id to pwd and edit text to "empty blank".

↓

Button's id to btn and text to "login"



We do change id's because it is mentioned in java-design code.



Connect to pixel & execute



In execution, we can validate by giving different usernames & passwords. Message shows login failed.



Login successful message is shown only when username is admin and password is welcome.

This is also set in java file.

Pg. 5

Create a new project



Import packages and edit the design part after return insets()); in MainActivity.java file.



Then in xml file, delete HelloWorld! and drag & drop 3 buttons



Connect Constraints



click on each button and change id:

1. btn1
2. btn2
3. btn3



Click on each button and change text

1. Explicit content
2. Implicit content
3. Contacts



Once it is done go to java file in the complete right, you see app

Click on that and



Click on >java



In that right click on the first file,

Select new → Then Activity →

Empty Views Activity



New tab appears, name will be
MainActivity2 and finish.



In MainActivity2, no change in
java file



In xml file of android file, add
a button and connect constraints



Connect to pixel & Execute

Execution

→ Click on first button, redirect you
to a page with single button
which we created in mainactivity2

→ Click on Second, redirect you to
choice

→ Third, Open contacts

Prg - 6

UI with all views

Create new project



No Change in code in the java
file



Go to xml file, delete HelloWorld!



Add linearlayout (vertical)



One plaintext



Search for RadioGroup in palette's
Searchbar, drag & drop. No Change
appear.



Search for RadioButtons and add 2

Radio buttons

↓

drag & drop one TextView

↓

Search for Checkbox and add

2 Checkboxes

↓

Search for Progressbar and Select
progressbar (horizontal)

↓

drag & drop a button

↓

Search for ImageView, drag & drop
Select the green image in the
given list as it works well
with all pixels

↓

Connect to pixel

↓

Run

We can change text of every
field we added and make it as

a form

Name - Empty blank

1-RadioButton - Male

2-RadioButton - female

TextView - Hobbies

1-Checkbox - Travelling

2-Checkbox - Music

Button - Submit

Prg. 3

Creating Menu

Create new project

↓

In the right, click on app then
in dropdown, click on src → right
click on src → New → Android
Resource Directory

↓

Then in dropdown, select menu

↓

menu directory is created under src.

Now right click on menu



New → Menu Resource file



Name it as menu_main.xml

Then in menu_main.xml, change the code



Then go to mainactivity.java



Import packages and change the design code after the return insets



Then in xml file, drag & drop a Toolbar from palette



Connect to pixel & Run



In Output, Click on '...' three dots & click on Search. Message shown 'Search Clicked'

If you click on Settings, message at 'Settings Clicked'.

Prg-8

Splash Activity

Create new project



No change of anything in both java & xml files



click on app then right click on res



New → activity → Empty Views Activity



Name new activity as splashActivity



In newly created activity, after return insets, change the code



Then in Splash xml file, Add a ImageView from palette

After Change code in SplashActivity.java file and adding ImageView in xml file,

↓
app → manifest

↓

Double click on AndroidManifest file

↓

In the last, activity_name
Interchange MainActivity to
.SplashActivity & Splash to Main

Then in SplashActivity.java file,
there appear few errors

Hover mouse on them → import
actions → Select first one for
Handler.

for Intent, Hover mouse & Select
import actions

for SplashActivity change Spelling

↓

Connect to pixel &
Run

Prg- 9

Read/Write local data

Create new project

↓

In java file, import packages
and change the design code
after return insets

↓

In xml file, delete HelloWorld
and drag & drop linear layout (vertical)
then 1 plaintext, 1 button & 1 TextView

↓

Change the id's
plaintext → editText

button → btnSave

TextView → txtResult

↓

Change text

plaintext → empty

button → Submit

textview → empty

↓

Connect & Run

Prg - 10

read / write SQldb

Same as 9th till changing
id's & text

↓

Id's

plaintext - input

button - save

textview - output

↓

text change

Same as 9th program

↓

Connect & run

MAD - OBSERVATION

15/4/25

Date _____

Page _____

* PROGRAM - 3 - Landscape, Portrait Modes.

- * Step 1 : Open a New Project (empty View Activity) in Android studio.
- * Step 2 : In the import activities statements, add two import statements

import android.widget.TextView;

import android.content.res.Configuration;

This ensures that the necessary libraries have been imported to be used in the program.

- * Step 3 : After the last line of the code add after } ;

```
TextView t = findViewById(R.id.tid);
```

```
if (getResources().getConfiguration().orientation  
== Configuration.ORIENTATION_LANDSCAPE) {  
    t.setText("Landscape Mode");
```

```
} else if
```

```
    t.setText("Portrait Mode");
```

```
}
```

```
}
```

In java file

- * Step 4 : Once the above step is completed, run the program.

Rotate left for portrait mode

Rotate right for landscape mode.

- * Step 5 : In xml file, click on hello world go to id and type 'tid'

PROGRAM 4: Login Credentials.

Step 1: Android studio → Empty View Activity
Open a new project

Step 2: Go to xml code

Drag plain text box (2 of them) and one button box

Click on plain text box 1 → id → usr (delete text)

Click on plain text box 2 → id → pwd (delete text)

Click on button box → id → btn (text = login)

Connect all three boxes to all the side.

Step 3: go to MainActivity.java, type the code
change " package com.example.myapplication;"
add " import com.example.myapplication.R;"

Step 4: Check for the conditions after running
the application successful.

Once all the conditions are checked, then the
program execution is completed.

1:46

5G

Hello World!

+

1:1



1:55

5G

Portrait Mode

1156

5G 4G

Landscape Mode

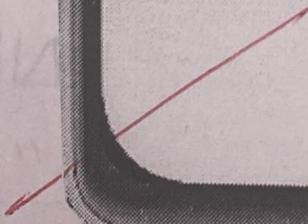
2:04

5G

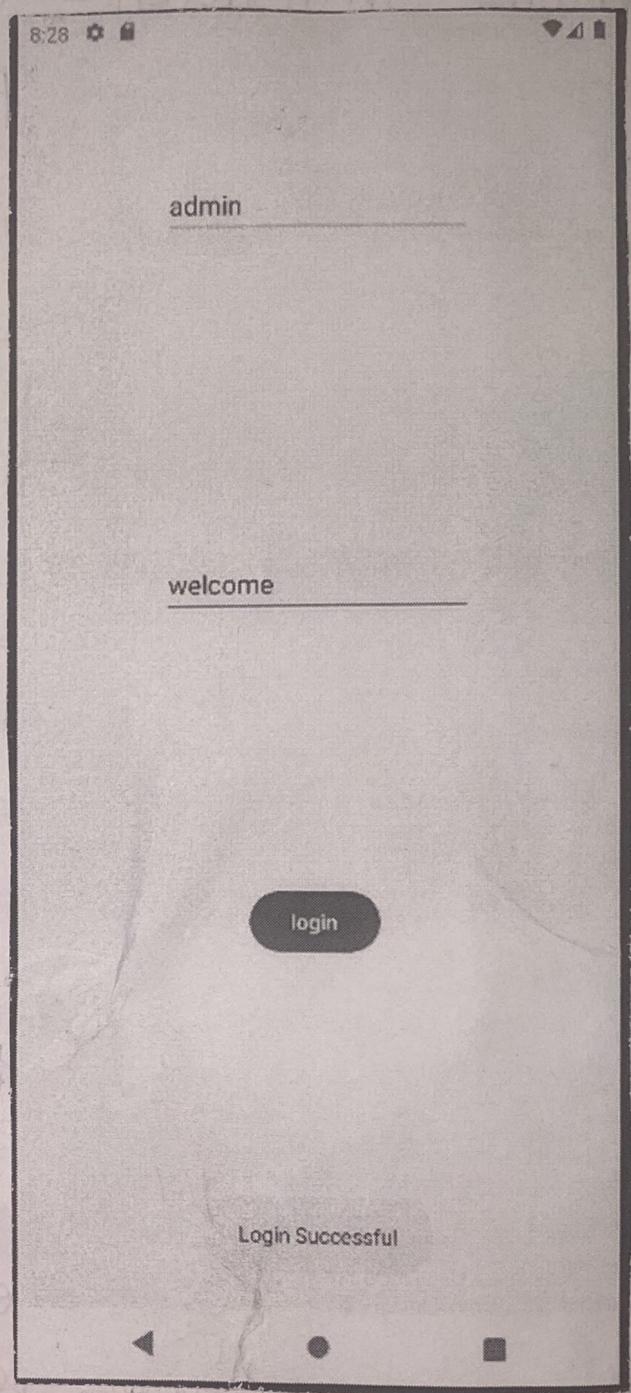
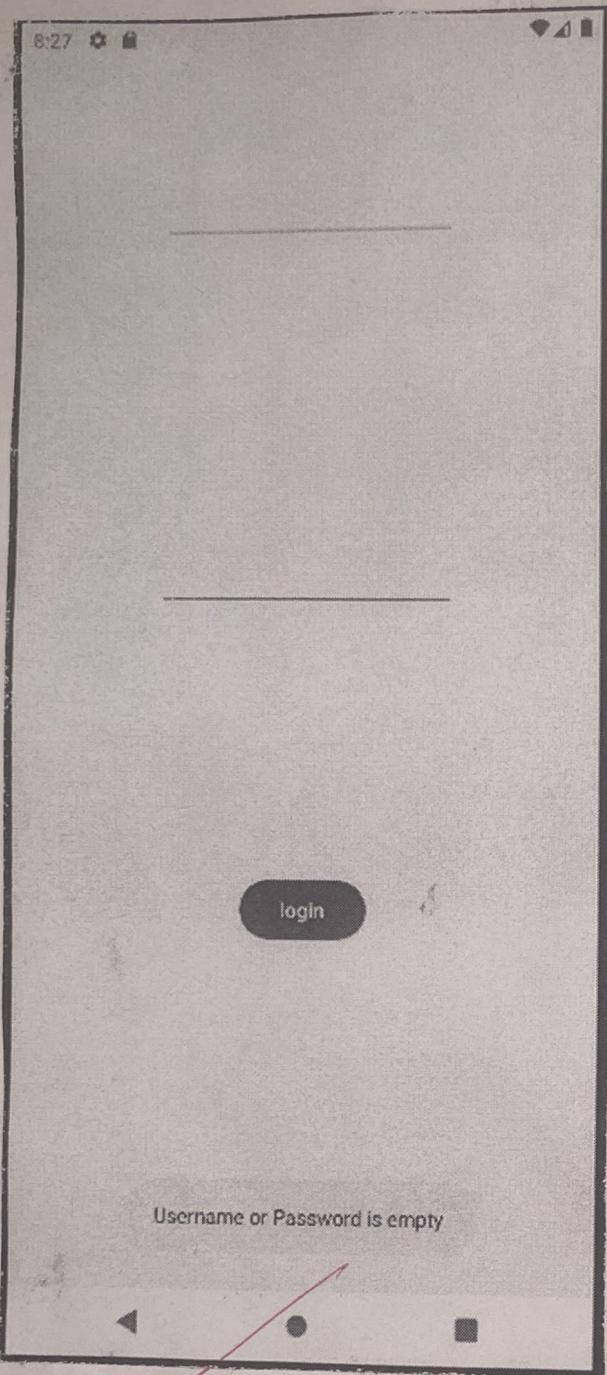
username

password

Login



* OUTPUT -



8:28

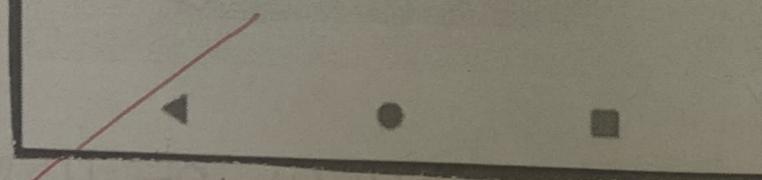


admin

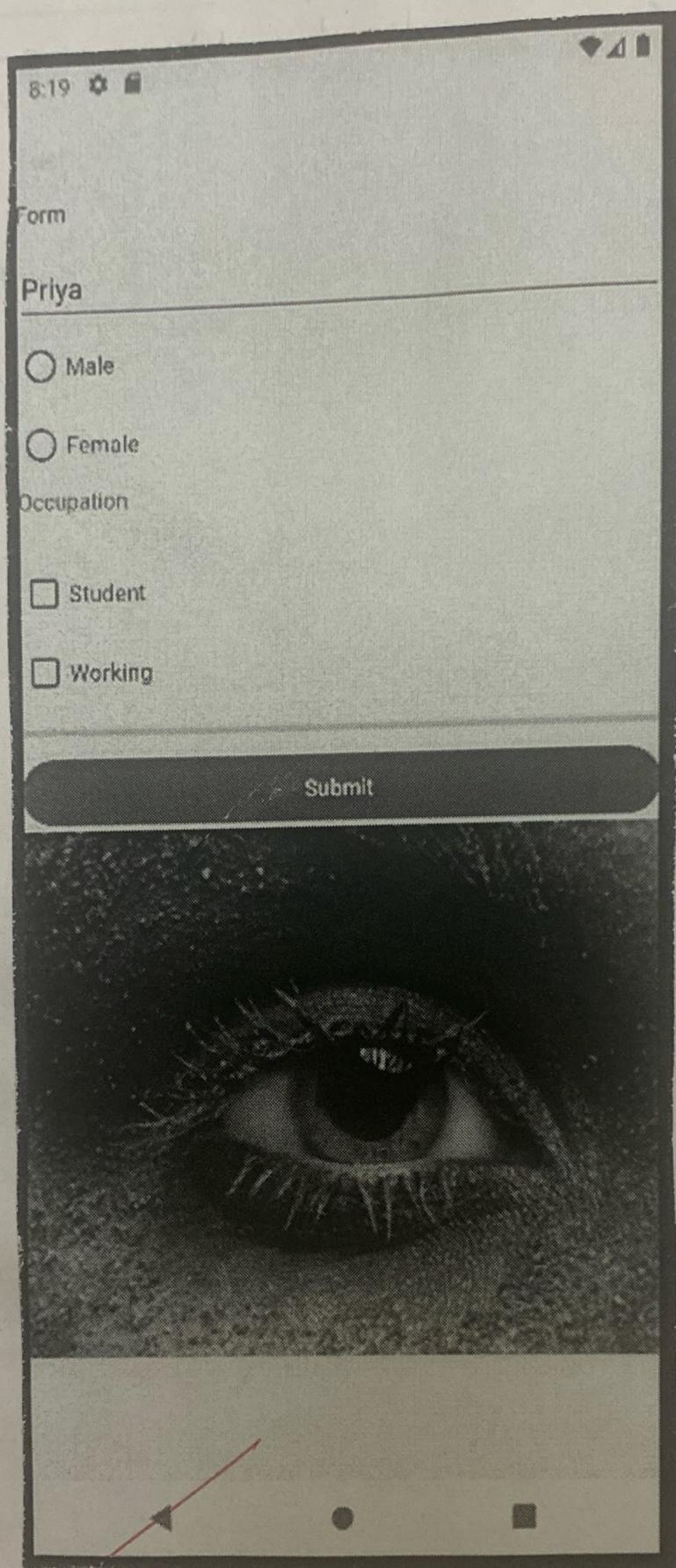
we

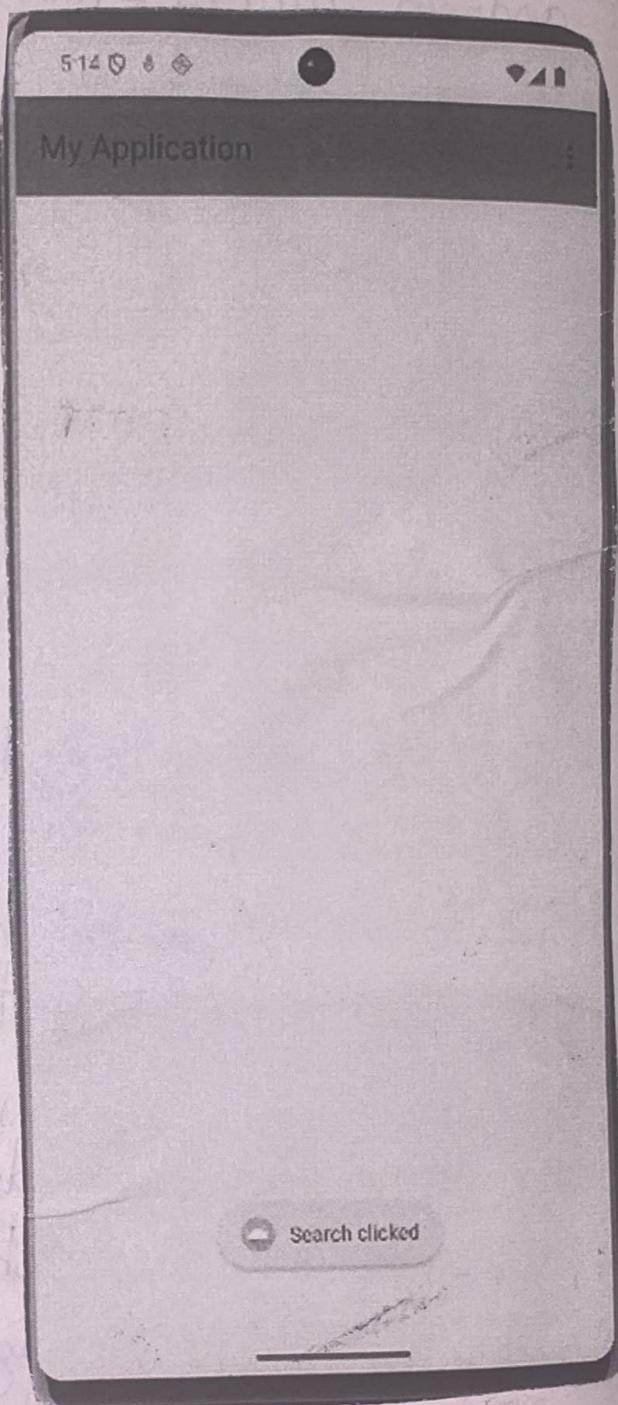
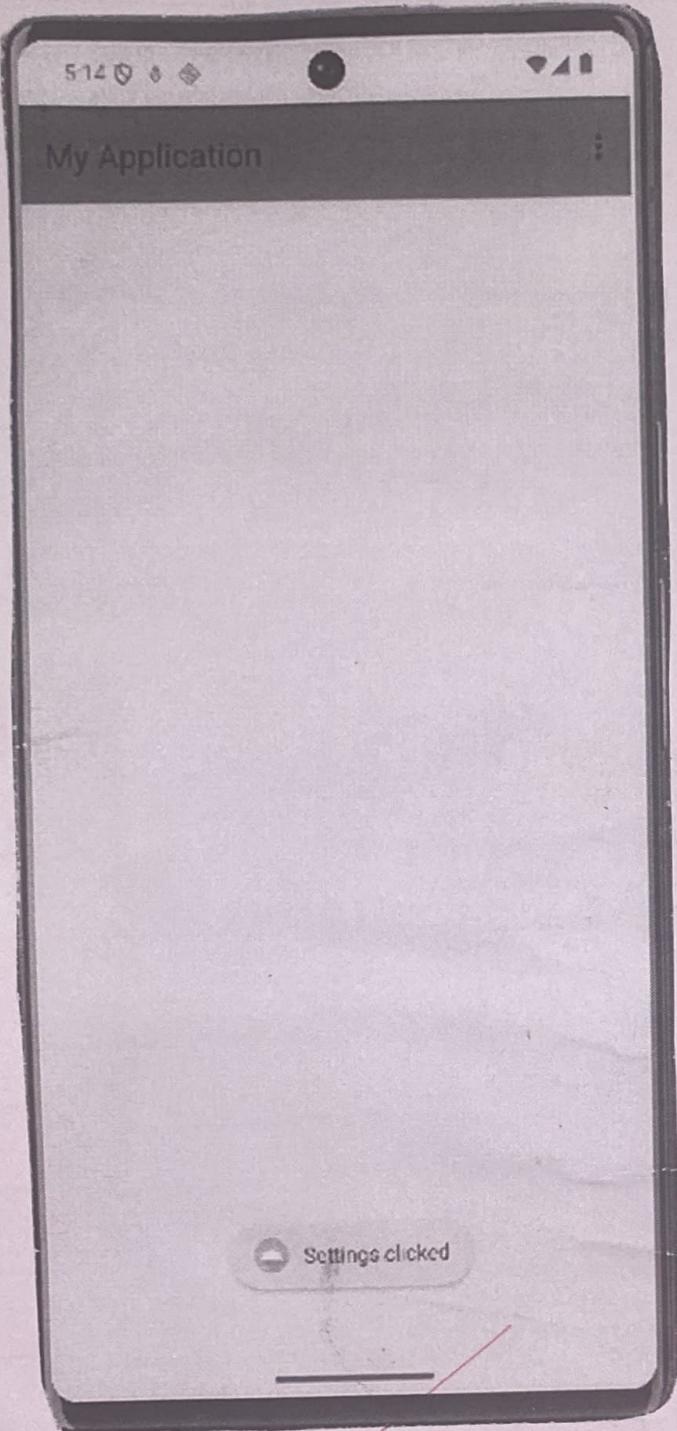
login

Incorrect username or password



UTPUT -





(6)

ste

(1) C

(2) H

I

(3) I

(4) C

Step

(1) R

(2) S

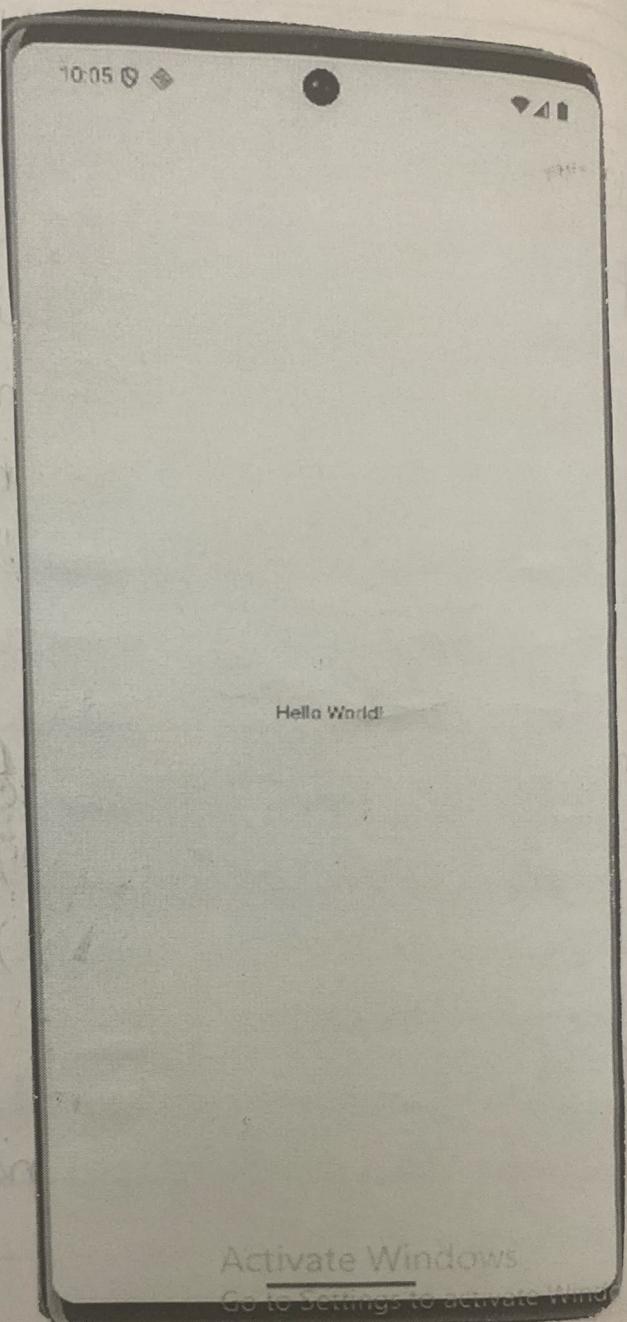
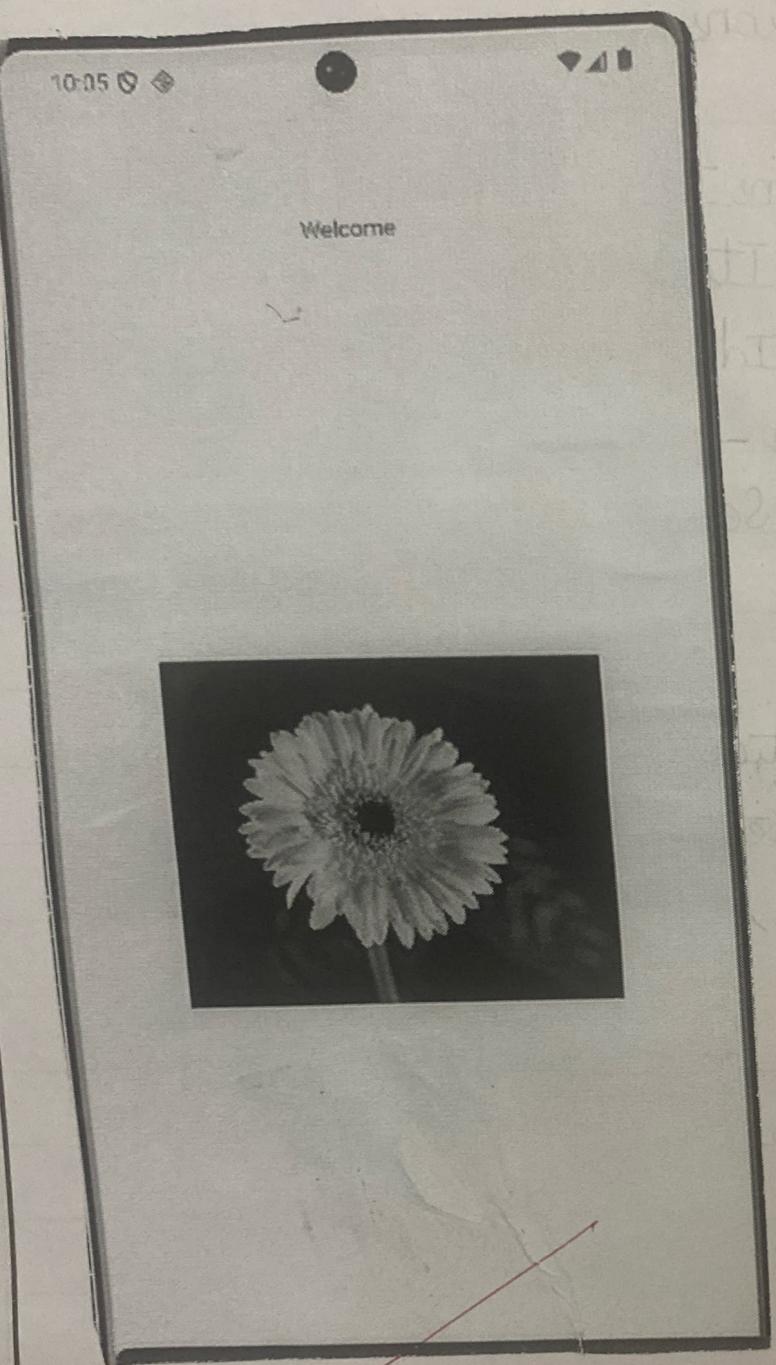
(3) N

(4) C

Step

W

OUTPUT:-



DATE:

(7)

O

Ana
Int

(i)

• S

l

(ii)

p

3:21



suha

save preferences

Hello suha.

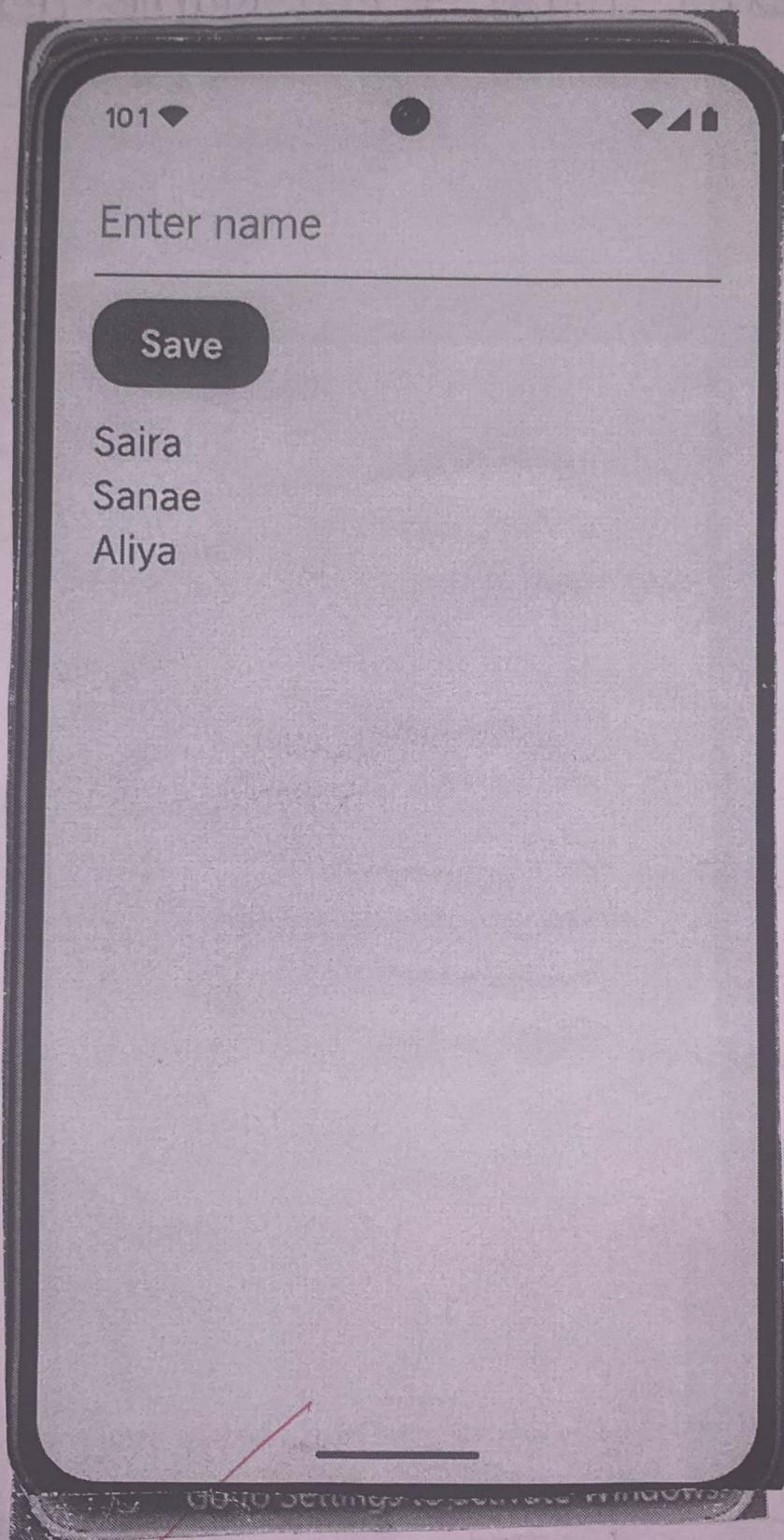
+

1:1

Activate Windows

Go to Settings to activate Windows

UT PUT-



OUTPUT -

