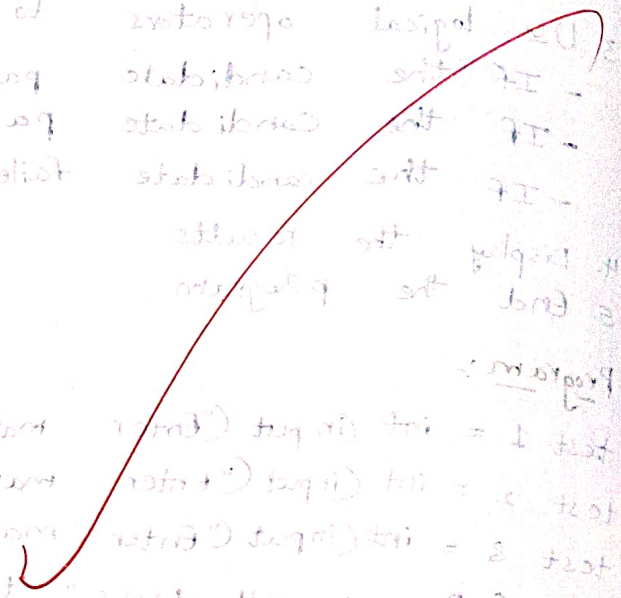
2.	30/07/25	Implement conditional, control and looping statements	15	13/8/25	

Output:-

Enter the room temperature : 20

comfortable



VEL TECH - CSE	
EX NO.	
PERFORMANCE (5)	
RESULT AND ANALYSIS (5)	
VIVA VOCE (5)	
(5)	

sd/7/25

Task - 2: Implement conditional, control and looping Statements

(a) Temperature Alert System (if - elif):

Aim:-

To write a python programme that classifies temperature as "Too cold", "Comfortable", or "Too Hot" using conditional (if - elif - else) statements.

Algorithm :-

1. Start
2. Accept temperature input from the user.
3. If temperature <18, print "Too Cold".
4. Else if temperature is between 18 and 25 (inclusive) print "Comfortable".
5. Else, print "Too Hot".
6. End.

Program :-

```
# Temperature Alert System
temperature = float (input ("Enter the room temperature: "))
if temperature <18;
    print ("Too cold")
elif 18 <= temperature <=25;
    printf ("Comfortable")
else:
    print ("Too Hot")
```

Result:-

The program correctly identifies the room temperature range and prints an appropriate alert.

9/8

Output:-

Enter password: test

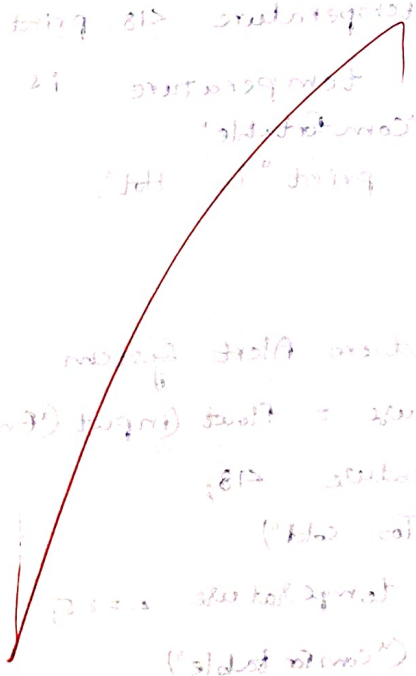
Incorrect password. Try Again.

Enter password: admin

Incorrect password. Try Again.

Enter password: admin123

Access Granted.



9/7/25

b. Password Retry System (While Loop)

Aim:-

To implement a password retry system using a while loop that allows a maximum of 3 attempts.

Algorithm:-

1. Start
2. Set correct password as "admin123".
3. set attempt counter to 0.
4. While attempts < 3:
   - Ask the user for password input
   - If correct, print "Access Granted" and exit loop.
   - Else, increment attempts and print "Try Again".
5. If attempts == 3, print "Access Denied".
6. End.

Program:-

```
#password Retry system
correct_password = "admin123"
attempts =0

while attlempts <3:
    entered_password =input ("Enter password:")
    if entered_password == correct_password:
        print ("Access ~~denied~~ Granted")
        break
    else:
        print ("Incorrect password. Try Again")
        attempts += 1
if attempts == 3
    print ("Access Denied")
```

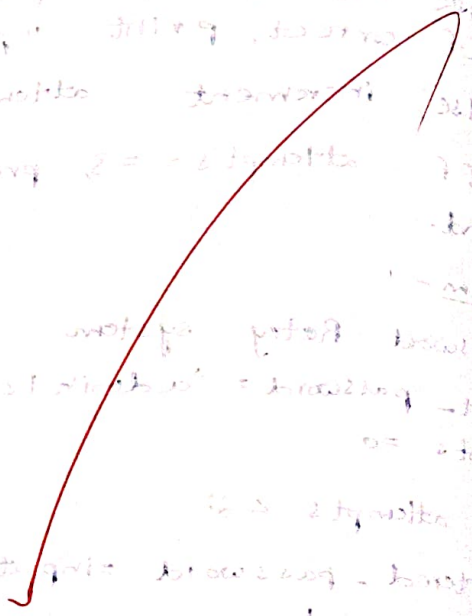
Result:-

The program allows upto 3 attempts and grants or denies access successfully.

Output:-

Enter a number: 5

Factorial of 5 is 120.



30/7/25

C. Factorial Finder (for loop)

Aim:-

To write a python program that calculates the factorial of a number using a for loop.

Algorithm:-

1. Start
2. Input a number from the user
3. Initialize result as 1.
4. loop from 1 to number (inclusive), multiply result by each value.
5. Print the result.
6. End

Program:-

```
# Factorial Finder
number = int (input ("Enter a number :"))
factorial = 1
for i in range (1, number + 1);
    factorial *= i
print ("Factorial of", number, "is", factorial)
```

VEL TECH - CSE	
EX NO.	2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
	13/8

Result:-

The program correctly calculates the factorial of the entered number using a for loop.

23/8/25