Date :- 30|07|25

Task 2: Impiement conditional ,control and looping. statements .

Aim:

To implement conditional, control and looping statements using python

Algorithm:

```
1. Start
2. Get the input mark from the user
3. with the use of an if-elif-else statement do
    • if the marks >=90 print grade "A"
    • if the marks is between 80 and 89 print grade "B"
    • if the marks is between 70 and 79 print grade "c".
    • if the marks is between 60 and 69 print grade "D"
    • if the marks is below 60, print grade "F"
4. Stop.
```

Program:

```
Score = int (input ("Enter the seore:"))
 if score>=90:
  print ["The grade is A"]
 elif(score <=89 and score>=80):
  print("The Grade is B")
elif(score <=79 and score >=90):
print ("The grade is c")
 elif(score <=69 and score >=60):
 print ("The Grade is D")
 else:
   print("The grade is F")
```

Result:

Thus the implement condition of looping statements Executed successfully.

Output

```
Enter the score: 60
The Grade is D.
```

2.2: password Retry system.

Aim: password Retry system a while loop, allowing up to 3 attempts to enter the correct password.

Algorithm:

```
1.Set correct_password to "admin123"
2.Set attempts to 0 and max_attempts to 3
3. while attempts < max_attempts:
      prompt user to "Enter password"
      Increment attempts by 1
      if Entered_password = = correct_password:
      print "login successfull"
      Exit loop
     EndIf
4. if entered_password != correct_password After loop:
5. End.
```

program:

```
def password_retry_system():
    correct_password ="admin123"
attempts =0
  max_attempts =3
while attempts <max_attempts:
   entered =input ("enter password:")
  attempts +=1
  if entered ==correct_password:
    print("login successfull")
return
else:
    remaining =max_attempts _attempts.
  print(f"Incorrect password.{remaining}
  print ("Tomany failed attempts. Access denied.")
```

Result:

Thus the password Retry system program Executed successfully.

Outputs

```
Enter password : wrongpass
incorrect password . 2 attempts left
Enter password : admin123
login successful!
```

Task 2.3 - factorial finder.

Aim:-

To find the factorial finder using a for loop.

Algorithm:

1. input number n
2. initialize a variable result (or factorial) to 1
3. loop from 1 to n inclusive
   - multiply result by the loop counter each iteration
4. After the loop, result holds the value of n!
5. output the result - or handle edge cases like n<0 or n=0.

Program:

```
def factorial_finder():
  try:
    n=int(input("Enter a non-negative integer:"))
 Except valueerror:
     print("Invalid input. please enter an integer number")
   return
   if n<0:
      print("factorial is not defined for negative number.")
  else:
   fact=1
   for i in range(1,n+1):
   fact *=i
   print(f"The factoriall of {n} is{fact}")
```

VEL TECH - CSE	
EX NO.	2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	15/8/25

Result:

Thus the factorial finder of the program executed successfully.

13/8/25

output

```
Enter a non-negative integer:5
The factorial of 5 is 120.
```