

Task 2: TO implement conditional, control and looping statements

13/8/25

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 mark is between 80 and 89 print
grade "B"

* If the mark is b/w 70 and 79 print
grade "C"

* If the mark is b/w 60 and 69 print
grade "D"

* If the mark is b/w 0, print grade "F".

4) Stop.

Score :-

for Program:-

```
score = int(input("Enter the score:"))
```

```
if score  $\geq 90$ ;
```

```
    print ("The Grade is A")
```

```
elif (score  $\leq 89$  and score  $\geq 80$ );
```

```
    print ("The Grade is B")
```

```
elif (score  $\leq 79$  and score  $\geq 70$ );
```

```
    print ("The Grade is C")
```

Output:

Enter the Score : 60

The Grade is D

EX NO.	
PERFORMANCE (5)	
PRESENT AND ANALYSIS (3)	
VIA VOCE (3)	
RECORD (4)	
TOTAL (12)	

```
else if(score <= 69 and score >= 60);  
    printf("The Grade is D");  
else:  
    printf("The Grade is F");
```

Sample Output

Enter Percentage: 85
Grade: B

Enter Percentage: 75
Grade: C

Enter Percentage: 65
Grade: D

Result:- Thus, the program has been

implemented and executed successfully

Q.2 The electronics maintenance team at a data center needs a tool to access the health status.

Aim :- Write a Python program that uses ladderized if-elif-else statements.

Algorithm:-

- 1) Accept battery percentage from the user.
- 2) Use ladderized if-elif-else to determine the health category.

* IF Percentage $\geq 90 \rightarrow$ "Excellent Battery Health"
* IF $70 \leq$ Percentage $< 90 \rightarrow$ "Good Battery Health"
* IF $40 \leq$ Percentage $< 70 \rightarrow$ "Average Battery Health"
* IF Percentage $< 40 \rightarrow$ "Poor Battery Health"

Python program:-

```
# Battery Health checker  
percentage = int(input("Enter battery percentage"))  
if percentage >= 90:  
    print("Excellent Battery Health")  
elif percentage >= 70:  
    print("Good battery Health")  
elif percentage >= 40:  
    print("Average Battery Health")  
else:  
    print("Poor Battery Health")
```

INPUT:-

Battery Charge Percentage(Integer)

SAMPLE OUTPUT:-

Enter battery Percentage : 85

Good Battery Health

sample input:

Enter height of visitor 1 in cm : 130

Enter height of visitor 2 in cm : 110

Enter height of visitor 3 in cm : 150

Enter height of visitor 4 in cm : 90

Enter height of visitors in cm : 125

sample output:

ALLOWED

NOT ALLOWED

ALLOWED

NOT ALLOWED

ALLOWED.

Q3 you're coding a system at an amusement

- part that checks the height of each visitor

Aim :- you're coding a system at an amusement

part that checks that height of each visitor.

Algorithm:-

Start the program

1) Set the total program no. of visitors to 5.

2) Loop from visitor 1 to visitors:

*) Accept the height of the visitor as input (in cm)

*) If height is greater than or equal to 180, print "Allowed".

*) Else, print "NOT allowed"

4) End the loop after 5 visitors have been checked

5) Stop the program

Program:-

```
for i in range(1,6):
```

```
    height = int(input("Enter height of visitor"))
```

- if height >= 180:

```
        print("Allowed to ride.")
```

else :

- print ("NOT allowed to ride")



Result:- Thus, the program was successfully implemented using conditional statements, control flow, and looping statements.

S-I-2 (in cm:))	
VEL TECH	
EX NO.	2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
W.M.D.T.E	15