

Program

```
score = int(input("Enter the score:"))
if score >= 90:
    print("The grade is 'A'")
elif (score <= 89 and score >= 80):
    print("The grade is 'B'")
elif (score <= 79 and score >= 70):
    print("The grade is 'C'")
elif (score <= 69 and score >= 60):
    print("The grade is 'D'")
else:
    print("The grade is 'F'")
```

Output:

Restart: C:\USC  
Enter the score: 60

The grade is D.

1	EX NO.
2	PERFORMANCE (2)
3	RESULT AND ANALYSIS (3)
4	VIA VOCE (3)
5	RECORD (4)
6	TOTAL (15)
7	IN WITH DATE

13-8-25.

Task 2: Implement conditional, control and looping statements

Aim: To implement conditional, control and looping statements using python.

2.1 you are developing a simple grade management system for a school.

If the score is 90 or above, the grade is "A"

If the score is between 80 and 89, the grade is "B"

If the score is between 70 and 79, the grade is "C"

If the score is between 60 and 69, grade is "D"

If the score is below 60, the grade is "F"

### Algorithm

- 1) Start
- 2) get the input mark from the user
- 3) with the use of an if-elif-else statement do
  - \* If the mark  $\geq 90$  print grade "A"
  - \* If the mark is between 80 and 89 grade "B"
  - \* If the mark is between 70 and 79 print grade "C"
  - \* If the mark is between 60 and 69 print grade "D"
  - \* If the mark is below 60, print grade "F".
- 4) Stop

Result: Thus the Implement conditional, control and looping statements using python successfully.

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: Enter battery percentage (integer)

Sample output:

```
Enter battery Percentage: 85
Good Battery health
```

Task 2: Write a Python program that uses ladderized If - elif - else statements

Aim: To 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  $> 90 \rightarrow$  "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".

Stop the program

Result: Hence the Python program that uses ladderized If - elif - else statements is done successfully.

Program

```
for i in range(1,6):
    height = int(input("Enter height of visitor " + str(i) +
                        " in cm:"))
    if height >= 120:
        print("Allowed to ride.")
    else:
        print("Not allowed to ride.")
```

Sample Input

Enter height of visitor 1 in cm: 130

Enter height of visitor 2 in cm: 110

3 in cm: 150

4 in cm: 90

5 in cm: 125

sample output

Allowed

Not allowed

Allowed

Not allowed

Allowed.

~~2000 : For a program asking for 5 integer inputs from user to check whether they are even or odd~~

TASK 2.3 checking the height of each visitors  
 \* If the height is 120 cm or more, Print "Allowed"  
 \* otherwise, Print "Not allowed".  
 Repeat this for 5 visitors

Aim: To check the height of each visitors

### Algorithm

1. Start the program.
2. Set the total no of visitors to 5.
3. Loop from visitor 1 to visitor 5:
  - \* accept the height of the visitor as input
  - \* accept the height of the visitor as input
  - \* if height is greater than or equal to 120  
 Point "Allowed".
  - \* Else, Point "Not allowed".

4. End the loop after 5 visitors have been checked

5. Stop the program

VEL TECH	
EX NO.	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
DATE	20/10/2023

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