

Program :-

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

```
if score >= 90:
```

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

```
elif (score <= 89 and score >= 80):
```

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

```
elif (score <= 79 and score >= 70):
```

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

```
elif (score <= 69 and score >= 60):
```

```
    printf("The Grade is D")
```

```
else:
```

```
    printf("The Grade is F")
```

Output :

===== RESTART: C:\User

Enter the Score : 60

The Grade is D

NAME	
ROLL NO	
PERFORMANCE (%)	
RESULT AND ANALYSIS (%)	
TEACHING VOICE (%)	
TECHNICAL (%)	
TECHNICAL (%)	
TECHNICAL (%)	

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. The system needs to determine the grade of a student based on their score in a test. The grading system follows these rules:

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, the 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-else statement do

- If the marks ≥ 90 print grade "A".

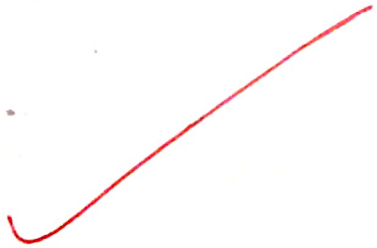
- If the mark is between 80 and 89 print grade "B".

- If the mark is 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



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")
```

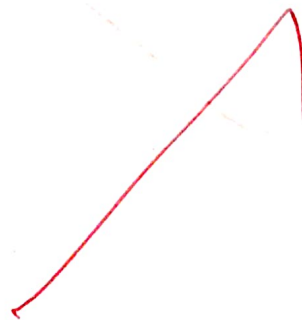
```
else:
```

```
    print("Poor Battery Health")
```

Output:-

Battery Charge percentage : 85

Good Battery Health

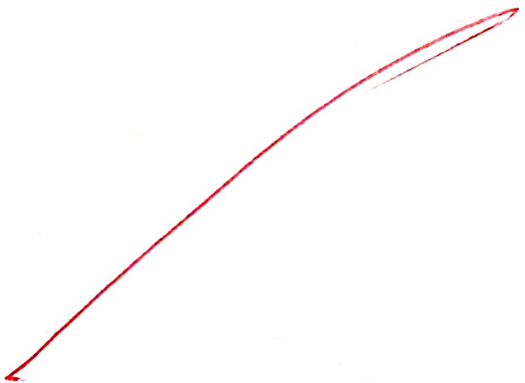


The electronic maintenance team at a data center needs a tool to assess the health status of UPS backup batteries based on their current charge percentage. You are asked to develop a Python programming that accepts the battery charge percentage as input and categorizes the battery health using the following conditions:

- If the percentage is greater than or equal to 90, display:
→ "Excellent Battery Health"
- If the percentage is between 70 and 89, display:
→ "Good Battery Health"
- If the percentage is between 40 and 69, display:
→ "Average Battery Health"
- If the percentage is below 40, display:
→ "Poor Battery Health"

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 $\text{percentage} \geq 90 \rightarrow$ "Excellent Battery Health"
 - If $70 \leq \text{percentage} < 90 \rightarrow$ "Good Battery Health"
 - If $40 \leq \text{percentage} < 70 \rightarrow$ "Average Battery Health"
 - If $\text{percentage} < 40 \rightarrow$ "Poor Battery Health"
- 

Program:-

```
for i in range(1,6):  
    height = int(input(f"Enter height of visitor {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

Enter height of visitor 3 in cm: 150

Enter height of visitor 4 in cm: 90

Enter height of visitor 5 in cm: 125

Sample output:

Allowed

Not allowed

Allowed

Not allowed

Allowed

Task 2.3

You're coding a system at an amusement park that checks the height of each visitor.

- If the height is 120cm or more, print "Allowed".
- Otherwise, print "Not allowed".

Repeat this for 5 visitors.

Algorithm 1:

1. Start the program
2. Set the total number of visitors to 5.
3. Loop from visitor 1 to visitor 5.
 - Accept the height of the visitor as input
 - If height is greater than or equal to 120, print "Allowed".
 - Else print "Not allowed".
4. End the loop after 5 visitors have been checked.
5. Stop the program.

Pre

VEL TECH	
EX NO.	
PERFORMANCE (5)	2
RESULT AND ANALYSIS (5)	4+
INTERVIEW (5)	4+
RECORD (5)	4+
TOTAL (20)	12+

Result: Thus, The python program was successfully implemented using conditional statements (if-else), control flow, and looping statements.