12/9/25

Task: 2 Implement Conditional, Control and looping Statements.

Aim: To implemat Conditional, Control and looping Statements

2.1 :- You are developing a simple grade managment system for a school. The system needs to determine the grade of student based on source in a test

If score is 90 (or) above, the grade is "A"
If score is b/w 80 and 89; the grade is "B"
If score is blw 70 and 79; the grade is "C"
If score is b/w 60 and 69; the grade is "D"
If score is below 60 then the grade is "F"

Algorithm:

1. Stast
2. Get input math from the user.
3. With use of If-elif-else Statement do
   - If mark >= 90 Printf grade "A"
   - If mark is between 80 & 89 Printf grade "B"
   - If mark is between 70 & 79 Printf grade "C"
   - If mark is between 60 & 69 Printf grade "D"
   - If mark is below 60, Printf Grade "F"
4. Stop.

Program:

```
Score = int(input ("Enter the Score"))
if Score >=90:
    Printf "The grade is A")
elif (score <=89 and score >=80):
    Print(" the grade is "B")
elif (" the . 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:

Enter the Score : 60

The grade is D.

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:
    Printf ("Poor Battery health")
```

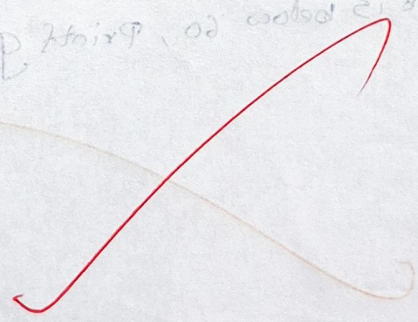
Input:

Battery charge Percentage (integer)

Sample outputs:

Enter battery Percentage : 85

good battery health.



2.2.:- The electronics maintenance team at data center needs to assess health status of UPS backup batteries based on current percentage. you are asked to develop a python program that accepts the percentage, health using following conditions.

- If the percentage is greater than or equal to 90, display:
  → Excellent Battery health.
- If the percentage is blw 70 & 89, display;
  → "Good Battery health".
- The Percentage is below 40 & 64, display;
  → "Average Battery health".
- If Percentage is below 40, display;
  → "Poor Battery health".

Task:

Write a Python Program that: uses laddetized if-elif-else Statements.

Algorithm:

1. Accept battery percentage from us.
2. Use laddetized if-elif-else to determine the health Category.

- If percentage ≥ 90 → "Excelent Battery health".
- If 70 ≤ Percentage < 90 → "Good Battery health".
- If 40 ≤ Percentage < 70 → Average Battery health".
- If Percentage < 40 → "Poor Battery health".

Program:

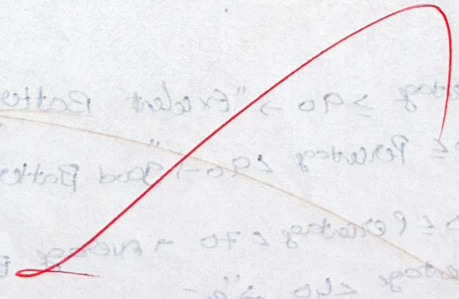
```
for i in range(1,6):
    height = int(input(f"Enter height of visitor {i} in cm:"))
    if height >= 120:
        Print("Allowed to ride.")
    else:
        Print("NOT Allowed to ride.")
```

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 : 175

Sample output:

Allowed
NOT Allowed
Allowed
NOT Allowed
Allowed



2.3 :- You're coding a system at an amusement park that checks the height if each visitor.

- If heights is 120cm or more, Print "Allowed.
- Otherwise, Print "Not allowed".

Repeat this for 5 visitor.

Algorithm:

1. Start the program.
2. Set the total number of visitor to 5
3. Loop from visitor 1 to visitor 5.
   - Accept the height of visitor as input
   - If height is greather 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.

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

Result: Thus, the Python was Successfully implemented using Conditional Statements (if-else), Control flows and looping statements.