TaskNO:21

Date: 13-8-25

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

Algorithm:-

→ start
→ Get the input mark from the user.
→ 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 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".

→ STOP

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")
```

<u>out put</u>:

Enter the score :60
the Grade is D

Task -22 :

Date : 13-08-25

Aim :

To write a python program that uses ladderized
if-elif-else statements

Algorithm:

→ Accept battery percentage from the user.
→ use ladderized if-elif-else to determine the health
category :
  → If percentage $\geq 90 \to$ "Excellent Battery health".
  → If $70 \leq$ percentage $< 90 \to$ "Good Battery health"
  → If $40 \leq$ percentage $< 70 \to$ "Average battery health"
  → If percentage $< 40 \to$ "poor Battery Health"

Program

```python
#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)
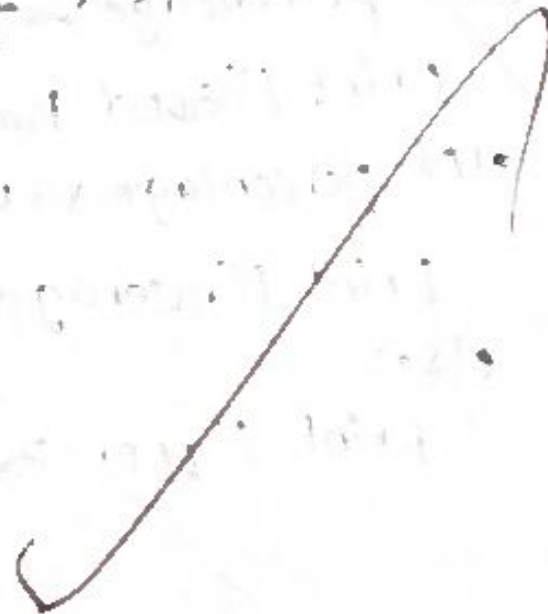
Sample output

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 visitor 5 in cm: 125

sample output

Allowed
Not allowed
Allowed
Not allowed
Allowed

Task NO: 2.3 :-

Date : 13-08-25

Aim :
To write a program to check the height of each visitor at a amusement park.

Algorithm.

→ start the program
→ set the total number of visitors to 5
→ loop from visitor 1 to visitor 5;
● → Accept the height of the visitor as input (in cm).
→ If height is greater than or equal to 120, print "Allowed".
→ else, print "Not allowed".
→ End the loop after 5 visitors have been checked.
→ stop the program.

Program:

```
for i in range (1,6):
    height = int (input (f "enter height of visitor {i} in cm :"))
    if height >= 120:
        print ("and allowed to ride.")
    else:
        print ("Not allowed to ride.")
```

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