Implement conditional, control and looping Statements

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

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 oules:

1) If the score is 90 or above, the grade is A".

2) It the score is between 80 to 89 the grade is 1

3) If the score is between 70 and 79, the grade 5 %!

4) It the score is between 60 and 69, the grade is "D!

5) If the score is below 60, the grade is F".

Algorithm:

1. Start

Q. Get the input mark from the user.

3. with the use of an If-elif-else statement di

* If the mooks = 90 point grade "A".

*If the mook is between 80 and 89 print grad

* If the mark is between 70 and 79 paint 900de c".

* If the mark is between 60 and 69 print grade "D".

* If the mark is below 60, point grade F."

4. Stop

output:

Enter the score: 60 The Groade is D

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Program:-
Score = int(input("Enter the score:")) if
Score >= qo:
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 p") else:
Print("The Grade is p") else:
```

Result! They, the Python program implease conditional, control bopping executed successfully.

= The electronics 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 program that accepts the battery charge percentage as input and categoriz the battery health using the following conditions * If the percentage is greater than or equal to

90, display:

> "Excellent Battery Health"

* If the peocentage is between 70 and 89 display:

⇒ "Good Battery Health"

* If the percentage is between up and 69, display:

> "Average Battery Health"

* It the percentage is below 40, display;

=> " Poor Battery Health."

Alm:-

write a python program that: uses ladderized if -elif-cise statements.

Algorithm:-

1. Accept bottlesy percentage from the user

a. We laddestzed if - elief-else to determine the health category;

* If percentage > 90 > "Excellent Battery Health"

```
Input is most or morning of some solutions of some of the sound of the s
                 Battery charge percentage cinteger)
           -Sample, output: Spoods from the
             Ener battery percentage: 85 ponts losses
           in Good Battoy, Health: All Door Prost od on
of the it orenings is greater than so equal to
                                                           o "Tixcelletik Bottleog Health"
                   at the peocentage is between to and sq
                                                        S'singed boulday theatth"
                of the peoplenings is between yound 6
                                                                   s Average Balting Hauting
                    4 the pencentage is below you display
                                                                                  => " POURO BULLETY HEAVILL
                                  DOINE O WITHER BOODOUM HAIL! (1868
                                         340kments.
    is a by northest bear bearing too the ness
                       ideb at 3210 19115 - 71 bestablish sh
```

if percentage < 90 > "Good Battery Health"

if 40 < percentage < 70 > "Average Battery

health"

* If percentage < 40 > "poor Battery Health".

Program:-

Battery Health checker

Percentage = int(input("Enter battery percentage:".

if percentage >=90:

Pomt ("Excellent Battery Health") elif

Peocentage > = 70:

Point ("Good Battery Health") elief

Percentage >= 40: 10000111 101/1

Point ("Average Battery Health") else! Point ("poor Battery Health")

Result: Thu, the python program it-elite.
Else statement encured scaccessfulle

sample inputied book a sip > 900

Enter height of visitor 1 in cm: 130 Enter height of visitor a 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 of bounding = apoingons Paint (Excellent , Eartroy 1188111199molly Not Anomed Politic Chood Button Health) about 1 Not allowed : Oh = = about 2000 Point (Avecage Roll by Health) bound LOLLOF C. BOTTESA RECORD) JOHNS

Social Thur, the pyglion proposed in the plue statement. . enderin 1. Se pre cosster

2.3 Aim: - you've coding a system at an amusement Park that checks the height of each visitor.

* If the height is ladem or more, point "Allowed * otherwise, print "NOt allowed".

Repeat this too 5 visitors.

Algorithm:

1. Start the program

a. Set the total no. of visitors to s.

3. Loop foom visitor 1 to visitor 5:

* Accept the height of the visitor as input

(in cm). If the height is greater than or equal to 1901 Point is Allowed."

* EISE, point "NOT Allowed."

4. End the loop after 5 visitors have been checked.

5. Stop the program.

Paggam:

for i in range (1,6):

height = intlinput (F Enter height of visito

?i'y i'n cm:")) if height = 120;

Point ("Allowed to ordex No. else: print (NOT allowed for the principle)

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RESULT AND ANALYSIS (5) VIVA VOCE (5) RECORD (5)

TOTAL (20)

Result: Thus, the python program was successi implemented using conditional statements Citelse), control flow, and looping statements.