B/8/25 Task 2: Implement conditional, Controlland 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 Corlabove, the grade is "A".

If the score is between 8 oand 89, the grade is B"

If the score is between to 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 : 8 "F".

Algorithm:

1) Start

2) get the input moric from the user

3) with the use of an If-elif-else statement do

* If the marks > = 90 paint gaade " A"

* If the marks is between so and sapsintgrade" B".

* If the marks is between to and top sint grade"c".

* If the marks is between 60 and 69 paint grade" D!

* If the mork is below 60, print grade "F"

4) Stop.

Perogram

Score = int Cinput (Enterthe source!)

if Score = = 90:

Paint ("The Grade 15 A")

elif(score < =89 and score >= 80);

Print ("The Grade is B")

elif (score z= 79 and score == 70);

paint ("The Grade 18c")

elif (score c= 69 and score 7=60);

Paint (" the Grade 180")

else: paint of the Grade is F"

Result: Thus implement conditional control and looping statement using python

raya wants to calculate the area of scalene triongle in sides of Length 8cm, 6cm, and 4cm tielpher write EATERD DESCRIBE + Prat combates theated resind Horou, 2

To write a python pengaam to find the area of largle when the lengths of all three sides are given

. withing

tast the panog and

Accept 609 assign the cengths of the those sides ian & c Calculate the semi-perimeter

S= appre

see Herop's formula to calculate the areas

Area = 15(5-a)(5-b)(5-c)

oisplay the area cof the triangle

ind-the psicogram

worsbord 40

port math

tepli pssign side Lengths

eps) colculate semi-perimeter

= (a+b+c)/2

eps; Apply Heron's - Commula

10 = math synt (5 * (5-0) * (5-b) *(6-6))

Phi Display spesult

int E' me area of metriangle it, sound (area, 2)

Charles and

ng Heron's formula.

output:

The Gradei's D

LECH - CSL

X NO. PERFORMANCE (5) RESULT AND ANALYSIS (3) VIVA VOCE (3) RECORD (4) (15)

ON WITH DATE

- The electronics maintenance team at a data center needs a tool to assess the health status of UPS backup batteries based on their current charage percentage as input and cate gorizes the battery health using the following conditions: * If the percentage is greater than (e) equal to 90, display. =) Excellent Battery Health" * If the percentage is between 70 and 89, displays = "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" Task: Write a python perogram that: Uses Ladderized if-elif-eise statements topled party Algorithm: 1) Accept battery percentage from the user. 2) Use Ladderized if -elif-else tode termine the health Category 1 * If percentage 7,90-)" Excellent Battery Health". * If 70 < percentage < 90 > "Good Battery Health". * If 40 < percentage < 70 -) "Average Battery Health". # If percentage & 40 -> " Poor Battery Health". Parogram: # Battery Health Checker percentage = intlingut ("Enter battery percentage")) if percentage == 90) paint (Excellent Battery Health") elifpercentage 7 = 70; Print ("Good Battery Health") elif percentagez=40; Paint ("Average Battery Health") else Pount C' Poor Battery Health") Result: Thus the electronicy main tenance team estadolog
 - Result: Thus the electronicy main tenance team conductions

 Center needs a tool to assess the health status of upstackup

 batteries based on their current

Tosk &: Implement conditional, control and looping statements int To Implement conditional, control and looping statements Woytha Briss you are developing a simple grade management system for shock the system needs to determine the grade of a student base denthern score in a test. The grading System follows these autes: "A" ai shoreports, svodp tro of endages Cinteger) II of the scare is petween to and to the grade is "c". Enter pattery y purcentage: 85 Enter pattery y purcentage: 85 Good Battery Health condting 14 Septime subing mout thoughthe ness Swith the use of an I felif-eve statement do "A" Spoed this dobe c steem out to # * If the marks is between so and sapaintgrade" B! * If the marks is between 40and 49Paint glande" c". * Of the mosks is between 60 and 69 print grade" o" * 21 the most is below to, paint grade "F! 90st2 (# Percyan Score Pirt Conput C'Emerthe Source "D 16 5 CO10 2 36 PAINT ("The Grade 15A") (108= 59 ron2 box 0 P8= 5 98032)+il Perint ("The Grade is B) (OF- 5980)2 5/10 PF-5 380)2) 11/ to at aborn ant 19 taled (100 = Carpo Pd and Score 7=60) paint (" The Grade 180") point C'The Great eisey have their most problement contract and i which the

4

The company of the second Sameple Hippiling more or and the stage of t Enter height of usitor linewills?

Enter height of usitor linewills? Enter height of visitor 3 inchises Enter haight of Usidor will can a some Elter haight of vistors beauties the said from the said the sai same occupati Same Same Now Wilder Barrens of the second of the second of the Willows of Williams to draw in all the fight of paperage in Cinglet Co Eniter Fronteend being being 1) inter to collect the property Comment of the man tenter of the section Apertours of the grant of the Called to Charles Broken A Marie 199 Marie Marie Land Carlotte Cape of Enalter Design

2:3 you've coding a system at an amusement parkthat cheeks the neight of each visitor.

* If the heigh is 120cm or more, print" Allowed".

* Otherwise, paint " Not allowed"

Repeat this for 5 visitors.

Algorithm:

1) Start the program

2) set the total number of visitors to 5

3) Loop from visitor 1 to visitor 5:

*Accept the neight of the visitor as input cin (m)

* else, paint "Not allowed"

4) End the Loop after & visitors have been checked

5) Stop the program

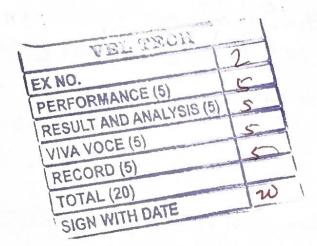
Psiogsiam

for i'm range (1,6);

height = int (input Cfl Enter neight of visitor &izincm:")) ion= < theight >= ho;

paint() Allowed to ridery

els e paint ("Not allowed toride")



Result: Thus, python program was successfully implemented asing conditional Statements Cif-elses control flow and looping statements