CATHOLIC UNIVERSITY OF EASTERN AFRICA
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE
CMT 434 PYTHON FOR DATA SCIENCE

CLASS WORK 1

Notes and Instructions:

This is group work
Attempt all question
All programmes should be written in python
Submit by uploading to ODEL by 04/10/2024

Questions

1. Write a programme that initializes two real numbers and computes their sum, difference, product and quotient.
2. Write a program that initializes the length and width of a rectangle with integers and uses a function to compute and display the area and perimeter.
3. A college uses the grading criteria defined below for all units that students take in any course:

score	Grade
Greater than or equal to 70 but less than 100	A
Greater than or equal to 60 but less than 70	B
Greater than or equal to 50 but less than 60	C
Greater than or equal to 40 but less than 50	D
Greater than or equal to 0 but less than 40	E

Required:
write a programme that determines the grade given a score. The score should be an integer.
Write a programme

4. The data below show the height in feet' and inches'' of 5 pupils in grade 5.

height=[3.6, 3.9,4.0,3.4,4.1]

Required:
write a program that:

  i.   Initializes a python list/array called height with the values above
  ii.   Displays the height of every pupil (hint -use for ..in construct)
  iii. Computes and displays the average height of the pupils
  iv.   Adds the height of a sixth pupil into the array called height (use append())
  v.   Removes the height of the last pupil in the array (hint (use pop method)