

CS19001: Programming and Data Structures Laboratory

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http://cse.iitkgp.ac.in/~aritrah/course/lab/PDS/Autumn2018/CS19101_PDS-Lab_Autumn2018.html

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Programming Assignments

Complete and submit during lab

Assignment no 1.

Write a C program that

- requests the user to enter as input a floating point value indicating the temperature of an object in Celsius.
- converts the input into Fahrenheit and prints the value as output.

Assignment no 2.

Write a C program that reads five positive real numbers a, b, c, d and e from the user and compute their

- Arithmetic mean $AM = \frac{(a+b+c+d+e)}{5}$

- Harmonic mean $HM = \frac{5}{\frac{1}{a} + \frac{1}{b} + \frac{1}{c} + \frac{1}{d} + \frac{1}{e}}$

- Standard deviation $SD = \sqrt{\frac{a^2+b^2+c^2+d^2+e^2}{5} - (AM)^2}$

Your program should print the output in the format "AM = ____, HM = ____, SD = ____".

Assignment no 3.

Write a C program that

- Reads the coordinates of the three (real valued) vertices of a triangle ABC.
- Print the length of the three edges of ABC in the format "AB = ____, BC = ____, CA = ____".
- Print the radius of **the** circle on which the vertices A, B and C are located.

Thank You