



THE SUPERIOR University, LAHORE

Department: Computer Science & Information Technology

Subject: Programming Fundamentals

Assignment 2

Instructor: Eng. HM Zahid

Note:

- ❖ You have to write and run your code in Dev C++ and code along with screenshots of output should be included in submission copy. (Assignment should be in proper format and should submit before 29 Jan 2020).
- ❖ Each question carries equal marks. Weightage of assignment would be decided at the end of the semester.
- ❖ Use appropriate data types like temperature, bill, etc in float.

Q: 1 We need to perform calculations according to the following equations. You are supposed to write function for each equation where the small letters are parameters.

$$(a) \quad Z = \frac{8.8(a+b)^2/c - 0.5 + 2a/(q+r)}{(a+b)*(1/m)}$$

$$(b) \quad X = \frac{-b + (b*b) + 2 \pm \sqrt{4ac}}{2a}$$

$$(c) \quad R = \frac{2v + 6.22(c+d)}{g+v}$$

$$(d) \quad A = \frac{7.7b(xy+a)/c - 0.8 + 2b}{(x+a)(1/y)}$$

Q: 2 Write C program for the following:

- Write a function that takes distance between two cities (in km.) and the function converts and prints this distance in meters, feet, inches and centimetres.
- Two numbers are input through the keyboard into two locations C and D. Write a function to interchange the contents of C and D. (Hint: Use parameter by reference).

Q: 3

Write a function to calculate overtime pay of 10 employees where the number of working hours is given to function in an array. Overtime is paid at the rate of Rs. 12.00 per hour for every hour worked above 40 hours. Assume that employees do not work for fractional part of an hour.