

CMPE 101 - Intermediate Programming

Assignment-01

Worth 5% of the assignment mark!

Deadline: 09:00 Friday, February 18

In your assignment, explain your code with *comments*. Without *comments*, your assignment will not be marked. All class and method names must be used according to OOP concept.

Question 1

The following mathematical function is given.

$$f(x, y) = x^4 + 3y^3 - 100x^2$$

Please write it with the Java programming language and convert it into valid Java methods according following data type.(It means you will have three different methods)

1. x and y are integers, but “f” is short.
2. x is float, y and f are long.
3. x and y are long, but f is float

Test your methods inside a main method (see lecture examples how to access method inside a main method). Explain possible results with different numbers.

Question 2

Write a Java method that makes following calculation (suppose, x is long, z is float, y is short, and f is double).

$$f(x, y, z) = \frac{3z^2 - 10x^3 + 100y^2}{y^4 z^2 x^3}$$

Test your method inside the main method (see lecture examples how to access method inside main method). Explain possible result with different numbers.

Note: you are not allowed to use any IDE tools such Eclipse!.