

05/11/2018

BLM1011
Introduction to Computer Science
Assignment - 1
(Due 12/11/2018 - 23:59h)

Please, do not forget to analyze your algorithm.

Q1

Design an algorithm which gives the output of a function $f(x,n)$.

$$f(x, n) = \frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!} - \dots + \frac{x^{2n+1}}{(2n+1)!}$$

Inputs: x and n

Output: $f(x,n)$

Example:

X: 2

N: 2

$f(x,n) = 112/120 = \underline{\underline{0.9333}}$

Q2

Design an algorithm which finds the minimum and maximum 4-digit cube number. Write the necessary code in Pascal.

Output: minimum 4-digit number
Maximum 4-digit number

Cube Numbers : 8, 27, 64, 125, 216 ...

BLM1011

Specifications for Assignments

Submission

- Assignments submitted after submission deadline (at most 2 days late) will be evaluated over 50. Do not send any e-mail 3 days after submission deadline.
- Collaboration on any assignment is strictly prohibited. Submitted assignments are automatically checked for similarities. Infractions will be given a zero for the entire assignment.
- Assignments **MUST** be submitted by e-mail. Every student must send his/her assignment to the following e-mail address.

amac@yildiz.edu.tr

- Subject of the e-mail **MUST** contain course name, Assignment # and student number in specified format written below;

Example Subject :

BLM1011_Assignment_1_18011001

Content

1. An PDF file which contains
 - a. **Question** - A brief description for each question
 - b. **Solution** - An explanation for each solution
 - c. **Flowchart** - Flowchart for each solution
 - d. **Analysis** - should be given for each question and each possible different cases

should be submitted via e-mail. The name of the PDF file should be given as follows: STUDENTID.PDF

Example File Name:

18011001.pdf

- Do not forget to prepare a cover page which should include
 - Course Name
 - Course Group
 - Instructor Name
 - Assignment Number
 - Delivery Date of the Assignment
 - Student Id
 - Student Name and Surname
 - Signature
- You can draw your flowchart either by your hand or by computer. Just work clean !!!

ATTENTION

- Assignments that don't comply with submission rules will **NOT** be evaluated. **"NO EXCEPTION"**