

BIL110E Introduction to Programming Language (C)

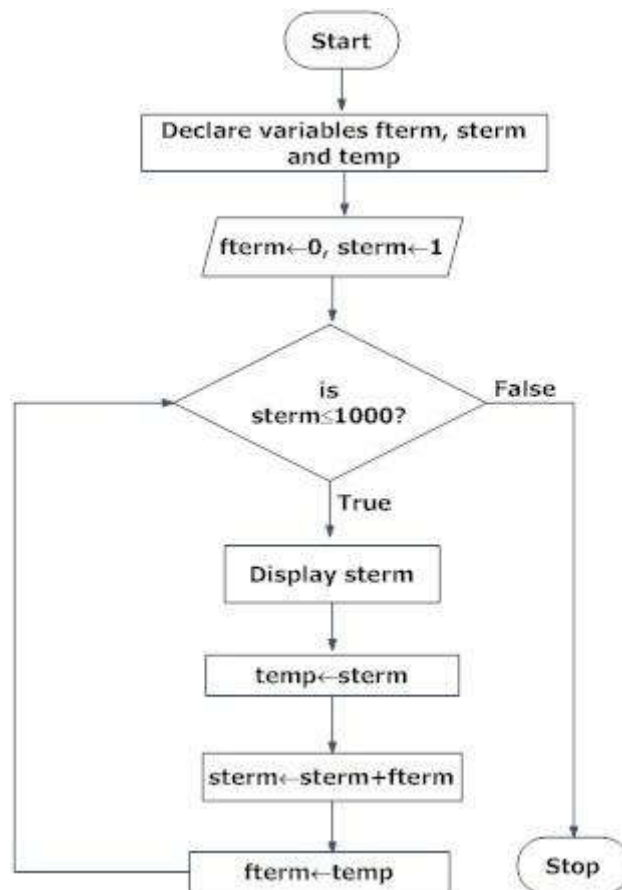
Homework I (Due: 24.11.2019 23:59)

1. Write a code in C language

- to calculate the sum of the odd integers from m to n. The variables m and n should be defined by the user. This operation should be done in a function.
- to calculate the sum of the even integers from m to n. The variables m and n should be defined by the user. This operation should be done in a function.

(Note that the user should select if the sum will be for the odd or even numbers. Use switch-case or if else if)

2. Convert the flowchart below into a C program.



3. The difference equation is given as

$$x_{k+1} = x_k - ax_k h$$

Where

$$x_0 = 10 \quad a = 3 \quad h = 0.1$$

- a) In a loop calculate and print each and every value of x until $k = 100$
- b) Ask the user to enter the values of x_0 , a , h and the final value of the iteration k

The difference equation should be in a function. The inputs are x_0 , a , h . The output is x_{k+1}

Rules :

Please do it by yourself. Never submit the same homework with another student.

You should upload all your work to Ninova as instructed below.

The codes for each question should be in a folder named HW1-1, HW1-2, HW1-3 first indicating the number of the homework, second the question number.

You should combine all these folders in a folder with your name and student ID no. For example: NameSurname_123456789

Please upload your homework before the due date. Late homework is not accepted.