ENVE 204 ENGINEERING HYDRAULICS

COMPUTER PROJECT -2

PIPELINE SYSTEMS

Deadline of the Project: 04/5/2018 (Friday)

Program will be written in MS Excel or in Visual Basics and will calculate the a) flow rate b) diameter of the pipeline by using Darcy-Weisbach equation:

a) Determine the flow rate (Q) if the allowable total head loss and the pipe combinations are given

Inputs **:** Length, diameter, pipe material, allowable head loss, temperature

Outputs **:** friction factor, velocity and flow rate

Note: Friction factor should be calculated by using explicit equations

b) Determine the pipe diameter (D) if the flow rate and allowable total head loss are given.

Inputs **:** Length, pipe material, flowrate, temperature, allowable head loss

Outputs **:** friction factor, velocity, nominal diameter

Note: Friction factor should be calculated by using explicit equations

Program should ask the units of the problem (SI or British Units) and should make necessary conversion in the calculations and formulas.

You will submit the program by e-mail to the following adress

hydraulicsmarmara2018@gmail.com

Name of the file should be in following form;

" ENVE 204 COMP. PROJECT-2 (STUDENT NAME & NO)"