



T.C. İSTANBUL KÜLTÜR ÜNİVERSİTESİ
Engineering Faculty
Computer Engineering Department
2024/2025 Spring
COM4023 COMPUTER ORGANIZATION

LAB Assignment 2

Read the following instructions:

- 1. You can download the assignment from the Assignments section in CATS.*
- 2. The name of your assignment should be in the format (Assignment name_Student_ID). For example; Assuming your student number for this assignment is 2000001565, the naming of your assignment will be (Assignment2_2000001565).*
- 3. You must submit your assignment in **.asm** format to CATS. Assignments submitted in other formats such as pdf, word, jpeg will not be considered.*
- 4. You must submit the .asm files containing the answers to each question in a single folder.*
- 5. Your assignment will not be accepted by e-mail, you must upload it to CATS by the due to the specified deadline. No delay will be accepted (No excuses).*
- 6. Any question without an answer will be graded 0.*
- 7. Students who copy their answers from their friends or give their answers to their friends will be graded 0 in this assignment.*

Q1 (50 Points): Write an MIPS Assembly code (.asm) to find the maximum and minimum number from a list of 10 integer numbers, then print the maximum value on the screen.

- Define an integer array that contains 90, 68, -92, 46, 300, -54, -19, 431, -5, 12.
- Print the min and max elements of this array on the screen.

Q2 (50 Points): Write an MIPS code (.asm) that checks if an integer entered by the user is a perfect number or not. If the entered integer number is perfect, it will output a "This is a perfect number" message. Otherwise, it will output a "It is not a perfect number" message on the screen.

Hint: In number theory, a perfect number is a positive integer that is equal to the sum of its positive divisors, excluding the number itself. For instance, 6 has divisors 1, 2, and 3 (excluding itself), and $1+2+3=6$, so 6 is a perfect number.