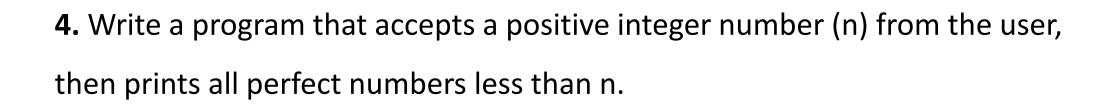# Introduction to programming

Lab 4

1. Calculate $S(n) = 1 + 1.2 + 1.2.3 + \ldots + 1.2..n$, $n > 0$.

2. Print all even divisors of n, n > 0.

3. Write a program that accepts a positive integer number from the user, and check whether it is a perfect number.

- In number theory, a perfect number is a positive integer that is equal to the sum of its positive divisors, excluding the number itself.

- E.g., 6 has divisors 1, 2 and 3, and 1 + 2 + 3 = 6, so 6 is a perfect number.

4. Write a program that accepts a positive integer number (n) from the user, then prints all perfect numbers less than n.

5. Do exercises on SPOJ at the following link:

https://www.spoj.com/EIUPROGR/problems/introf20_03/