

LAB 02

Task# 01:

Write a program that converts a positive integer into the Roman number system. The Roman number system has digits I (1), V (5), X (10), L (50), C(100), D(500) and M(1000). Numbers up to 3999 are formed according to the following rules:

- a) As in the decimal system, the thousands, hundreds, tens and ones are expressed separately.
- b) The numbers 1 to 9 are expressed as: 1 I 6 VI 2 II 7 VII 3 III 8 VIII 4 IV 9 IX 5 V (An I preceding a V or X is subtracted from the value, and there cannot be more than three I's in a row.)
- c) Tens and hundreds are done the same way, except that the letters X, L, C, and C, D, M are used instead of I, V, X respectively.

Example: Your program should take an input, such as 1978, and convert it to Roman numerals, MCMLXXVIII.

Task# 02:

Write a program that calculates the user's body mass index (BMI) and classify it as underweight, normal, overweight, or obese, based on the table from the United States Centers for Disease Control.

Task # 03:

Write a program to compute quotient and remainder of a number without using division (/) operator and modulo (%) operator. Also mention procedure for calculating