OOPM Programming Assignment - 1

1. WAP to calculate the CGPA of a semester if the SGPA and total credits of each semester upto that semester is known. Below is the formula to find it.

$$CGPA = \frac{\sum_{j=1}^{m} SG_j \, NC_j}{\sum_{j=1}^{m} NC_j}$$

here NC_j is the number of total credits offered in the jth semester, SG_j is the SGPA earned in the jth semester, where $j = 1,2,.....$ m, are the number of semesters in that programme.

2. WAP to check the eligibility of a 12th pass-out student in Engineering admission. A student is eligible to take admission in B.Tech only when his/her addition of marks in physics, chemistry and maths is 45%. A student is also eligible only when individual percentage in each subject is 40% or more. Assume that max marks in each subject is 100.

3. WAP to find all the factors of a given number.

4. WAP to find the Nth number in the given series:

   a. 1, 2, 3, 4, 5, 6, ... n
   b. 2, 4, 6, 8, 10, ... n
   c. 1^3 , 2^3 , 3^3 , 4^3 , 5^3 , 6^3,... n
   d. 1x2, 2x3, 3x4, 4x5, ... n
   e. 1x2x3, 4x5x6, 7x8x9,...n

5. Write a C Program to count the Number of Integers Divisible by 5 in the range 0-1000.