

Week-1 Exercises

1. Get the input as name of a person and his age in years. Write a C program to compute how many seconds that person have lived till this age.
2. Write a program to print the numbers that are divisible by 7 between 1 and 100. Also find the sum of those numbers and print that sum.
3. Write a program to generate every third integer from 0 to N ($N < 100$). Also calculate the sum of those integers that are evenly divisible by 5.
4. Write a program to compute the exponential value of a given number X using the following series.
$$e(x) = 1 + x + x^2 / 2! + x^3 / 3! + \dots$$
5. Write a program to generate a $n \times n$ (where n is an odd integer) magic square such that the sum of any row or column elements must be the same.

Example:

7 5 3

2 9 4

6 1 8

6. Given a seat matrix where column represents branches, row represents colleges and the cell data hold number of seats vacant, create a function that allocate seats for n students based on their preferences. User preferences should be in string. Give provision to convert it into numerical index before allocating seat. Give appropriate error message if there is no vacancy.