## Lab Test 2023 ADA/Section-A/MCA 2023

1. Write a c program to initialize number of item(n), bag capacity(M), weight vector(W) and profit vector(V)

N=5,M=15 W=<2, 8, 4, 3, 5> V=<5, 12,20, 9,10>

Define a function to find optimal value of bag using greedy fractional knapsack. Print the value

2. Implement Bubble sort. Count and print the number of times the elements are compared to each other and number of times the element swapped.

Test case

Input: Enter n:4

Enter elements: 10,70,30,80

Output:

Array: 10,30,70,80 Number of comparison : 6 Number of swap :16

3. Implement merge sort algorithm. Modify the merge() that doesn't use sentinel (∞).