Q1: Given a weighted undirected graph. Write a program to Find the sum of weights of edges of a Minimum Spanning Tree using Prims Algorithm.

Input:
Given *2* integers *N* and *M*. *N* represents the number of vertices in the graph. *M* represents the number of edges between any *2* vertices. Then *M* lines follow, each line has *3* space separated integers a_i, b_i, w_i where a_i and b_i represents an edge from a vertex to a vertex and w_i represents the weight of that edge.

Output:
Print the summation of edges weights in the MST.

Constraints:
$2 \le N \le 10000$
$1 \le M \le 100000$
$1 \le a_i, b_i \le N$
$1 \le w_i \le 1000$

SAMPLE INPUT
4 5
1 2 7
1 4 6
4 2 9
4 3 8
2 3 6
SAMPLE OUTPUT
19

Q2: Write a program to implement knapsack problem using greedy method

1. Given a set of items, each with a **weight and a value**.
2. Determine the **number of each item** to include in a collection so that the total weight is less than a given limit and the total value is as large as possible.
3. It derives its name from the problem faced by someone who is constrained by a **fixed-size knapsack** and must fill it with the most useful items.

Sample Input and Output :

Enter the no. of objects:- 7

Enter the wts and profits of each object:-
2 10
3 5
5 15
7 7
1 6
4 18
1 3
Enter the capacity of knapsack:- 15

The result vector is:- 1.000000   1.000000   1.000000   1.000000
   1.000000   0.666667   0.000000

Maximum profit is:- 55.333332