

## Fractional Knapsack

Given *weights* and *values* of **N** items, we need to put these items in a knapsack of capacity **W** to get the *maximum* total value in the knapsack.

**Note:** Unlike 0/1 knapsack, you are allowed to break the item.

### Example 1:

**Input:**

```
N = 3, W = 50  
values[] = {60,100,120}  
weight[] = {10,20,30}
```

**Output:**

240.00

**Explanation:** Total maximum value of item we can have is 240.00 from the given capacity of sack.

### Example 2:

**Input:**

```
N = 2, W = 50  
values[] = {60,100}  
weight[] = {10,20}
```

**Output:**

160.00

**Explanation:**

Total maximum value of item we can have is 160.00 from the given capacity of sack.

**Your Task :**

Complete the function ***fractionalKnapsack()*** that receives maximum capacity , array of structure/class and size n and returns a double value representing the maximum value in knapsack.

**Note:** The details of structure/class is defined in the comments above the given function.

**Expected Time Complexity :**  $O(N\log N)$

**Expected Auxilliary Space:**  $O(1)$

**Constraints:**

$$1 \leq N \leq 10^5$$

$$1 \leq W \leq 10^5$$