In [2]:
```
# Title :- Write a program to solve a fractional Knapsack problem using a greedy metho
```

In [16]:
```
def fractionalKnapsack(W, arr):
    arr.sort(key=lambda x: (x.profit / x.weight), reverse=True)
    finalvalue = 0.0

    for item in arr:
        if item.weight <= W:
            W -= item.weight
            finalvalue += item.profit
        else:
            finalvalue += item.profit * W / item.weight
            break

    return finalvalue

if __name__ == "__main__":
    W = 50
    arr = []
    n = int(input("Enter number of items-\n"))

    for i in range(n):
        profit = int(input("Enter profit of item " + str(i + 1) + "-\n"))
        weight = int(input("Enter weight of item " + str(i + 1) + "-\n"))
        arr.append(Item(profit, weight))

    w = int(input("Enter capacity of knapsack-\n"))
    max_val = fractionalKnapsack(W, arr)
    print(max_val)
```

```
Enter number of items-
3
Enter profit of item 1-
60
Enter weight of item 1-
10
Enter profit of item 2-
100
Enter weight of item 2-
20
Enter profit of item 3-
120
Enter weight of item 3-
30
Enter capacity of knapsack-
50
240.0
```