

Fractional Knapsack Problem

With python

Code :

```
def frac(value,weight):
    for i in range(len(value)):
        net1 = value[i]/weight[i]
        for j in range(i+1,len(value)):
            net2 = value[j]/weight[j]
            if(net2>net1):
                value[i],value[j]=value[j],value[i]
                weight[i],weight[j]=weight[j],weight[i]
                net1 = value[i]/weight[i]

    value = list(map(int,input("Enter the values in integer with a space in
between: ").split()))
    weight = list(map(int,input("Enter the weights in integer with a space in
between: ").split()))
    bag = int(input("Enter the size of bag: "))
    frac(value,weight)
    # print(value)
    # print(weight)

    frac(value,weight)
    ans = 0

    for k in range(len(value)):
        if(bag>=weight[k]):
            bag = bag - weight[k]
            ans = ans + (weight[k]*value[k])
        else:
            mark = k
            break

    ans = ans + (value[mark]/weight[mark])*bag

    print("You can carry maximum this ammount of value : ",ans)
```