

Greedy Knapsack

Student name :	I51496
Student email / username :	2103a51496@sru.edu.in
Class name :	III_DAA_I_23-24
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Earned Score :	Pending
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solution.c

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```
#include
struct item{
    int wt,pf, ino;
    float pwr,x;
};

void knapsack(struct item a[],int n,int m){ // implimenting knapsack
    float tp = 0;
    int i,j;
    for(i=0;i<n){
        if(a[i].wt <= m){
            a[i].x = 1.0;
            printf("%d ", a[i].wt);
            m -= a[i].wt;
            tp += a[i].pf ;
        }
        else
            break;
    }
    if(m>0){
        a[i].x = m/((float)a[i].wt);
        printf("%.2f", (a[i].wt * a[i].x));
        m = 0 ;
        tp += (a[i].x * a[i].pf);
    }
    printf("\n%.2f",tp);
}

void sort(struct item a[], int n){
    int i,j;
    struct item temp;
    for(i=1;i<n;j--){ // sorting according to profit by weight ratio
        if(a[j].pwr < temp.pwr)
            a[j+1] = a[j];
        else
            break;
    }
    a[j+1] = temp;
}
```

```
    }  
}  
void main(){  
    int i,j,m,n;  
    scanf("%d",&m);  
    scanf("%d",&n);  
    struct item a[n];  
    for(i=0;i
```

Name

Test Case 1

Input

```
20 5  
6 20 6 30 4 20 10 24 2 16
```

Output (Lines: 2)

```
2 6 4 6 2.00  
90.80
```

Expected Output (Lines: 2)

```
2 6 4 6 2.00  
90.80
```

StatusPass
