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#include <iostream>

using namespace std;

int main()
{
    int n;
    float prft=0;
    float W;
    float p=0;

    cout << "Enter the value of n : ";
    cin >> n;

    float profit[n];
    float weight[n];
    float p_w[n];
    float x[n];

    cout << "\nEnter the weight a bag can hold : ";
    cin >> W;

    int wt=W;

    for(int i=0;i<n;i++)
    {
        x[i]=0;
    }

    cout << "Enter profits : ";
    for(int i=0;i<n;i++)
    {
        cin >> profit[i];
    }
    cout << "Enter weights : ";
    for(int i=0;i<n;i++)
    {
        cin >> weight[i];
    }
    for(int i=0;i<n;i++)
    {
        p_w[i]=profit[i]/weight[i];
    }

    for(int i=0;i<n;i++)
    {
        for(int j=0;j<n-i-1;j++)
        {
            if(p_w[j]<p_w[j+1])
            {
                float temp=p_w[j];
                p_w[j]=p_w[j+1];
                p_w[j+1]=temp;

                float temp2=weight[j];
                weight[j]=weight[j+1];
                weight[j+1]=temp2;

                float temp3=profit[j];
                profit[j]=profit[j+1];
                profit[j+1]=temp3;
            }
        }
    }

    for(int i=0;i<n;i++)
    {
        if((wt-weight[i])>=0)
        {
            wt=wt-weight[i];
            p=p+weight[i];
            x[i]=x[i]+1;
        }
    }
}

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    }
    else
    {
        x[i]=(W-p)/weight[i];
        wt=wt-weight[i]*x[i];
        p=p+weight[i]*x[i];
    }
}

cout << endl;

cout << "Profit : " ;
for(int i=0;i<n;i++)
{
    cout << profit[i] << "\t";
}
cout << endl << "Weight : ";
for(int i=0;i<n;i++)
{
    cout << weight[i] << "\t";
}
cout << endl << "Count : ";
for(int i=0;i<n;i++)
{
    cout << x[i] << "\t";
}

for(int i=0;i<n;i++)
{
    prft=prft+(profit[i]*x[i]);
}

cout << endl;
cout << "Profit : " << prft << endl;

return 0;
}

```