时间限制：C/C++/Rust/Pascal 2秒，其他语言4秒
空间限制：C/C++/Rust/Pascal 512 M，其他语言1024 M
Special Judge, 64bit IO Format: %lld

题目描述

Donkey thinks potato chips are the best food ever!

So today, when he decides to go on a long journey, he wants his backpack filled with all kinds of potato chips. He searches through the snack zone in his home and finds lots of potato chips.

To better decide which bags of potato chips to bring with him (a subset of the total bags, possibly none of them), he defines the property of a bag of chips as follows:

- h_i. The happiness this bag of chips can give to Donkey.
- s_i. The space this bag of chips occupies.
- d_i. The delicacy of this bag of chips.

For simplicity, we note h_i, s_i, d_i as the "happiness", "space" and "delicacy" of the bag.

The total occupied space of the chosen bags can't exceed the volume of the backpack, which is V.

However, the unoccupied space may cause bumps when Donkey moves during the journey, which further causes value loss. If the chosen chips are $i_1, i_2, \ldots, i_k$ $(k \geq 1)$ and the unoccupied space is U, the total value loss on account of bumps is $(d_{i_1} + d_{i_2} + \cdots + d_{i_k}) \times U$. If you choose no bag of chips, the value loss is 0.

Considering both the advantages and disadvantages of bringing chips, the value of the whole backpack is the sum of happiness brought by these bags of chips minus the value loss. Donkey wants to maximize this value, but just can't make the decision. Help is needed for this!

输入描述:

Each test contains multiple test cases. The first line contains the number of test cases T $(1 \leq T \leq 10^4)$.

Each test case consists of many lines.

The first line contains 2 integers n, V $(1 \leq n \leq 10^5, 1 \leq V \leq 500)$, the number of chip bags and the total volume of the bag.

Each line from the 2-nd to the $(n+1)$-th contains 3 integers h_i, s_i, d_i $(1 \leq s_i \leq 500, 1 \leq h_i, d_i \leq 10^9)$, the

C++（clang++18）
1
ACM模
请通过
入输出
出描述
运行结果 自测