In what is becoming known as the "trial of the millennium," the Swamp County District Court is handling the highest profile case ever to reach the county court system. Learning from the experience of people involved in the "trial of the century," the Swamp County judiciary decided to adopt a few new rules to avoid gridlock in court proceedings. Among the new rules is a cap on the total amount of time each side is allowed to present its case.

Each side will be allowed 8 hours for opening arguments, 240 hours for evidence presentations, and 16 hours for closing arguments. With this ground rule set, the court hopes to be able to bring the case to the jury in less than five months. While this rule hopefully will help to ensure a speedier trial, it presents a huge challenge to both the prosecution and the defense teams. Both teams must figure out how to best utilize their allocated time slots by presenting the most convincing and comprehensible evidence to the jurors.

Your team has been contracted by the Swamp County District Attorney's Office to develop a decision support system to help the prosecution team formulate its strategies in selecting what material from its pool of evidence to present. Since the system may prove to be useful for future trials that have presentation time limits imposed, the D. A.'s Office has requested that you make the system flexible enough to handle other cases.

The decision support system will select the material based on the score that the prosecution team assigns to each piece of evidence and the time cost associated with presenting it to the jury. The more useful the piece of evidence is, the higher its score. The prosecution team therefore has to come up with a set of evidence with the highest aggregate score.

Input

The input begins with a single positive integer on a line by itself indicating the number of the cases following, each of them as described below. This line is followed by a blank line, and there is also a blank line between two consecutive inputs.

Input to the decision support system consists of the total allowed time for evidence presentation on the first line followed by entries for all the evidence that the prosecutor has. Each line presents one piece of evidence, with the first field showing its score, the second field indicating the estimated amount of time for its presentation, and the third field containing its general description. Fields are separated from each other by spaces, and the third field may contain embedded spaces.

The score is based on a 1...10 integer scale while the time cost is expressed in full hours. In any given trial, the amount of time allowed for evidence presentation of the prosecution team shall not exceed 240 hours. The total number of evidence items shall be less than or equal to 100, and the length of the evidence description shall be no greater than 68 characters. Evidence items may appear in the list in any order.

Output

For each test case, the output must follow the description below. The outputs of two consecutive cases will be separated by a blank line.

Output will be a list of evidence to be presented along with the cost and benefit each of them brings, the aggregate score, and the total time for their presentation. Label the columns and the totals, following the format of the sample output below. If no evidence can be presented in the time allowed, the program should print this single line message:

```
There is not enough time to present any evidence. Drop the charges.
```

Sample Input

```
1

240
5 4 Inspector supervising evidence collection at the crime scene
3 4 Crime scene photos
4 8 411 operator recording
3 8 Officer who arrested defendant in a previous incident
2 8 Victim's neighbor 2
1 8 Victim's neighbor 3
6 40 The victim's cousin
8 48 The defendant's current housemate
10 60 Coroner's report
5 16 SCSD Crime Lab technician 1
4 16 Taxi cab driver
2 16 SCSD Crime Lab technician 2
1 16 The defendant's personal trainer
5 24 Officer responsible for making the arrest
3 24 Victim's neighbor 1
2 24 The victim's supervisor at work
1 24 Pizza delivery person
3 1 A discarded plastic fork at the crime scene
5 32 The victim's brother
7 40 The victim's personal physician
1 1 An email the victim sent to his cousin the week before the incident
2 2 Bloody sock
6 64 Blood analysis results by chief criminalist of the SCSD Crime Lab
```

Sample Output

```
Score  Time  Description
-----  ----  -----------
    3     1   A discarded plastic fork at the crime scene
    1     1   An email the victim sent to his cousin the week before the incident
    2     2   Bloody sock
    5     4   Inspector supervising evidence collection at the crime scene
    3     4   Crime scene photos
    4     8   411 operator recording
    3     8   Officer who arrested defendant in a previous incident
    2     8   Victim's neighbor 2
    5    16   SCSD Crime Lab technician 1
    4    16   Taxi cab driver
    5    24   Officer responsible for making the arrest
    7    40   The victim's personal physician
    8    48   The defendant's current housemate
   10    60   Coroner's report


Total score: 62 points
 Total time: 240 hours
```