Problem G. Happiness

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	256 megabytes

Pang has graduated from college 3 years and he really misses the time he spent with ICPC(Interspecies Collegiate Pokemon Camp).

There are 10 problems in one contest in ICPC. n participating teams have 300 minutes to solve them. After the contest, teams are ranked according to the most problems solved. Teams who solve the same number of problems are ranked by least total time. The total time is the sum of the time consumed for each problem solved. The time consumed for a solved problem is the time elapsed from the beginning of the contest to the submittal of the first accepted run plus 20 penalty minutes for every previously rejected run for that problem. There is no time consumed for a problem that is not solved. If two teams tie, their *solution time list*s are calculated. A team's solution time list is a list consisting of solution times of all problems solved by that team, sorted in descending order. The solution time of one problem is the time elapsed from the beginning of the contest to the submittal of the first accepted run of that problem. (We do not add a penalty for the solution time.) The team with a lexicographically smaller solution time list has a better rank. A list $(a_1, \ldots, a_k)$ is lexicographically smaller than $(b_1, \ldots, b_k)$ if there exists an integer $i \in [1, k]$ such that $a_i < b_i$ and $a_j = b_j$ for all integers $j \in [1, i)$. If teams still tie, *Pang*'s team is assumed to have a better rank.

After determining the rank, prizes will be awarded. Initially, a team with rank r will get $\lfloor 5000/r \rfloor$ happiness. Then medals are awarded: Teams with rank 1 to $\lfloor n/10 \rfloor$ are awarded gold medal. The *happiness* of receiving a gold medal is 1200. Teams with rank $\lfloor n/10 \rfloor + 1$ to $3\lfloor n/10 \rfloor$ are awarded silver medal. The *happiness* of receiving a silver medal is 800. Teams with rank $3\lfloor n/10 \rfloor + 1$ to $6\lfloor n/10 \rfloor$ are awarded bronze medal. The *happiness* of receiving a bronze medal is 400. In addition to medals, for each problem, the team solved it first gets 800 happiness. The team with at least one solution and the smallest solution time overall teams and all problems gets an extra 700 happiness. The team with at least one solution and the largest solution time overall teams and all problems gets an extra 500 happiness. In the case of a tie, *Pang*'s team can always get happiness.

There were n teams in a contest *Pang* participated. He remembers all the submissions (time and verdict) of all other teams. For each problem, he also remembers if he knew the solution to that problem and the number of rejected runs and times he needed to solve it.

If *Pang* solved problems in the wisest order, what is the maximum happiness he could get? Note that *Pang* cannot solve any problem after 300 minutes from the beginning of the contest (He can solve problems at exactly 300 minutes). Once *Pang* solves a problem, he needs to submit it immediately and solve another one. He can't postpone his submission to get the last submission happiness.

Input

The first line contains an integer n denoting the number of teams ($10 \le n \le 300$, n is a multiple of 10).

Each of the next $n - 1$ lines describes one team and contains the statuses of the 10 problems. For each problem, if it is not solved by the team, the status contains a single character "-". Otherwise, the status contains two integers t and w separated by a single space denoting the solution time and the number of rejected runs before the solution time ($1 \le t \le 300, 0 \le w \le 10$). Statuses of different problems are separated by ",".

The last line describes *Pang*'s team. For each problem, if *Pang* did not know how to solve it, the status contains a single character "-". Otherwise, the status contains two integers x and y separated by a single space denoting the required time and the number of rejected runs before *Pang* could solve it ($1 \le x \le 300, 0 \le y \le 10$). Statuses of different problems are separated by ",".

There are no extra spaces and other characters in the statuses of *Pang* and other teams.

Output

Output one integer — the maximum happiness.

Example

standard input	standard output
10 233 1,-,-,7 7,257 4,173 5,117 1,-,-, 85 3 -,231 0,167 0,257 7,-,-,122 4,283 0, 215 4,- 41 1,-,290 8,-,-,-,-,246 7,120 3,184 9 142 8,243 7,69 0,-,41 9,-,279 1,264 4,-,74 9 53 8,-,187 9,60 1,48 8,99 10,-,-,55 7,259 5 250 0,-,-,-,166 0,16 3,-,82 4,73 0, 184 3 -,-,-,-,105 3,-,-,-,152 4,- -,84 5,98 8,-,120 8,241 3,94 1,-,28 7,109 8 280 6,246 5,58 9,-,-,-,-,-,-,- 38 10,-,227 10,187 9,182 1,-,203 9 ,254 7,-,-	1800

Note

Note that the sample input and sample output contain wrapped lines to fit in the width of page.