

Strategy Camp 1

Strategy is an important part of training for an aspiring Mentat secret agent. In this training, you will face off with other potential trainees in simulated battles.

Each battle is played between 2 players. Each player will have 100 warriors to distribute among 10 objectives numbered 1 through 10. Each objective is worth a different number of base points: specifically, objective N is worth N points. Your role as Mentat is to decide the distribution of your 100 soldiers across these 10 objectives. **You do not have to use all 100 soldiers.**

Then, the basic rules of each battle is as follows:

- Starting from objective 1 and going towards objective 10, at each objective, compare the number of warriors that the 2 players have assigned to that objective. The player with the higher number of warriors wins that objective and gets points equal to the number of that objective.
- In the case of a tie, neither player gets any points.
- There might be special rules which differ per battle.
- The player with the highest number of points wins. (In general, the goal is to score as high as possible).

For example, if only the base rules are in play, imagine that Alice and Bob are competing with the following distributions:

Objective	1	2	3	4	5	6	7	8	9	10	Total
Alice	10	10	10	10	10	10	10	10	10	10	100
Bob	0	0	5	5	10	10	15	15	20	20	100

Then, Alice wins objectives 1, 2, 3, 4 for a total of $(1 + 2 + 3 + 4) = 10$ points, and Bob wins objectives 7, 8, 9 and 10 for a total of $(7 + 8 + 9 + 10) = 34$ points. Neither player scores points at objectives 5 and 6.

Note that special rules may change the way scoring is calculated.

Battle 1

In addition to the standard rules”

- If you win at an objective and the amount of warriors you sent there has the digit “3” in it, score 3 more points instead.

For example, if Alice's distribution is [3, 0, 0, 0, 0, 0, 0, 30, 30, 37] and Bob's distribution is [0, 0, 10, 10, 10, 13, 23, 13, 13, 8], then Alice wins objectives 1, 8, 9, 10 and scores an extra 12 points for winning with the digit 3 at those 4 objectives for a total of $(1 + 8 + 9 + 10 + 3*4) = 40$. Bob wins objectives 3, 4, 5, 6, 7 and scores an extra 6 points for winning with the digit 3 at objectives 6 and 7 for a total of $(8 + 4 + 5 + 6 + 7 + 2*3) = 31$ points.

Enter your strategy below:

1	2	3	4	5	6	7	8	9	10

Name: _____

Team: _____

Battle 2

In addition to the standard rules:

- If you win at an objective and the number of warriors you sent there is strictly less than at the previous objective, score double the number of points for that objective instead.

For example, if Alice's distribution is [15, 5, 15, 5, 15, 5, 15, 5, 15, 5] and Bob's distribution is [2, 2, 2, 2, 2, 18, 18, 18, 18, 18], then Alice wins at objectives 1, 2 (doubled), 3, 4 (doubled), 5, for a score of $(1 + 2*2 + 3 + 4*2 + 5) = 21$ and Bob wins at the other five objectives for a score of $(6 + 7+8+9+10)=40$.

Enter your strategy below:

1	2	3	4	5	6	7	8	9	10

Name: _____

Team: _____