

A legendary group of epic fighters are planning an invasion on the planet Argus. Before they can march on the planet itself, they must first complete a set of quests out of which they will gain experience. After completing all the quests, only if they have gained enough experience will they be able to tackle the difficult challenge of invading the planet Argus. The heroes have the following classes: *damage*(D), *healer*(H) and *tank*(T).

In *heroes.txt* we find the list of all available heroes given by their name, class and power.

In *quests.txt* we find the list of all available missions given by their title, required classes, and required total power and experience gained.

In *req.txt* we simply find the required experience points which are needed to be obtained before our heroes can invade Argus (can be also defined as a constant, not read from the file).

Each quest can be “completed” only if there are enough heroes of the required types and the sum of their damage at least equals the sum of the required damage from the quest. See examples below.

As output, in the file *outcome.txt*, the outcome of each fight must be written on separate lines (example below) and the final decision, whether or not our heroes gained enough experience from these quests is written on the last line.

heroes.txt	quests.txt	req.txt	outcome.txt (your choice in hero order!)
Anduin,D,20 Jaina,D,28 Khadgar,H,23 Bolvar,T,29 Tirion,H,25 Varyan,D,26 Malygos,H,28 Thrall,D,27 Illidan,D,29 Malfurion,H,31 Mannoroth,T,21 Sylvanas,D,28	Kill Hogger,DDTH,90,10 Boars! oh Boars,D,21,29 Deadmines,THDDD,89,30 Extermin8,HT,41,20 Rats Aztek,TTTHHHH,61,190	100	Jaina,Varyan,Bolvar,Malfurion went on to complete “Kill Hogger” – SUCCESS (90 vs. 114) and gained 10 xp.  Thrall went on to complete “Boars! Oh Boars” – SUCCESS (21 vs. 27) and gained 29 xp.  Sylvanas,Illidan,Varyan,Mannoroth,Tirion went on to complete “Deadmines” – SUCCESS (129 vs. 89) and gained 30 xp.  Malygos,Bolvar went on to complete “Extermin8” – SUCCESS (57 vs. 41) and gained 20 xp.  Cannot execute mission “Rats Az-tek” – not enough heroes of type “T”. Cannot execute mission “Rats Az-tek” – not enough heroes of type “H”.  The group gained a total of 89 XP. Cannot attack Argus ☹

(Recommended) Steps:

- create proper structures for *heroes* and *quests*
- Read all the data from the files and store them in arrays
- tackle each quest sequentially. Is there something you can do to the array of heroes? Maybe sort them by something to make life easier?
- Create a function which decides how many of each class you need for a quest
- Prefer functions over putting everything in ‘main’.
- Think of how best to split something like “THDDD” in order to obtain how many of each class you need.