hulu™

It is the year 2195. You are one of the few remaining humans, hiding in the deep caves of the Californian sub-continent. Life is hard underground: it's dark, cold, food is scarce, and evil robots control the surface of the planet.

You are a hacker working for the resistance, and you managed to hack into one of the robot jails holding some of the humans. It turns out that the jail determines whether a human will live or die using a web service that allows the jailer to play a game of hangman. If the game is won, the human goes free; if the game is lost, the human dies. With your hack, you can control this in the favor of humans.

Write a program that saves the highest percentage of humans that you can (i.e. one that wins the highest proportion of games). Use any programming language that you want.

The jail's web service is at http://gallows.hulu.com/play?code=EMAIL – replace the EMAIL with your email address to successfully hack into the jail. When you call the web service, you will get a JSON object back.

The object will contain a **token –** this is the ID for the prisoner you are trying to save. Pass that token on every follow-on call that you make. The object will also contain a **status –** ALIVE, DEAD, or FREE **–** showing how the prisoner is doing. The **state** field will show the phrase that you have to guess, and will be filled in with underscores for letters you still have to guess, and actual letters that have already matched. A value **– remaining_guesses –** shows how many wrong guesses can make before the prisoner is killed.

So each follow-on call should look like:

http://gallows.hulu.com/play?code=EMAIL&token=TOKEN&guess=GUESS

where TOKEN is what you've gotten from the first request, and GUESS is a letter that you are guessing for the current round. Only letters A through Z should be guessed **–** punctuation and spaces are already filled in.

Call the first URL again to get the object for a new prisoner.

Some notes:

- When you are done, zip up all of your code and any data files you may have used and email it to us. We will take a look at your code, and make sure that your program makes its way to other human hideouts.
- Your goal is to write a program that saves the highest percentage of prisoners. It's inevitable that some will be lost, but how many is up to you.
- There's no need to continually try to save all the prisoners in the jail you've hacked **–** we're looking for code and algorithm quality, not the raw number you're saving at this particular jail. In fact, trying to save too many prisoners can cause the jail to break down and for the robots to kill all the prisoners at the same time. So please restrict your usage to no more than a single web service request per second.
- Only valid emails will work with the service, and you can only attempt to save one prisoner at a time.
- If your prisoner dies (i.e. you lose the game), the status will show the phrase that you failed to guess correctly.
- See http://en.wikipedia.org/wiki/Hangman_(game) if you are not familiar with the game of hangman.

You have 8 hours after you first call the web service to finish your program. After that, the robot overlords may discover your hack and cut off your access.