

Frequently Asked Questions

Q1: The preliminary grader outputs a warning like “violating calling convention with register <tx> in <label> before instruction call <function>”.

Ans1: This warning tells you that the value in <tx> will get overwritten after calling <function>. So if you want the value to stay the same after the function call, you will need to push the value onto the stack before calling <function>, but if it is a value you don't care about you can simply ignore the warning.

Q2: The preliminary grader outputs an error like “<functions.s>: undefined reference to <label>” even though the <label> exists in my code.

Ans2: This error means that the <function.s> is not supposed to call / use <label> even if it exists in the file, and you should change your implementation. An example of a common mistake is calling `reset_game` from inside `select_action`.

Q3: My <function.s> function fails all of the tests, even though it works fine on my machine

Ans3: Check that you are correctly applying the register conventions. Check that you either save values inside a save register, or push the register's value onto the stack before calling another function if you want their value to stay the same after the function call. The preliminary grader will give you warnings for such mistakes, so use it to your advantage.

Q4: Should the first seven segment display (i.e., the thousand's digit) be turned on and display 0 or should it be turned off ?

Ans4: We have updated the grader to not consider the value of the first seven segment display (i.e., the thousand's digit) during grading. The other three seven segment displays can take values from 000 to FFF, and the digits should overflow, meaning that if we add 1 to 00F, it should become 010 and not 000.

Q4: What actions are supposed to be done in `update_state` instead of `select_action` ?

Ans5: We consider any “action” that involves a change of state to be managed by `update_state` instead of `select_action`. For example this includes un-pausing the game when starting the game or pausing the game when the number of steps reaches 0.

Q5: My <function> takes a long time to execute on the simulator, will I get penalized by grader ?

Ans: No, the speed of your procedure will not be taken into account while grading and we have taken measures so that this doesn't cause a timeout. If a timeout does occur then it is most likely an error on your part due to not applying the register conventions and causing some undefined behavior, check Q3.

For more FAQ, please check out these ed posts: [what should happen at step == 0](#), [how does update_gsa work](#), [questions about the seed id](#), [what are walls in game of life](#), [what is the expected result of random_gsa](#), [how do I add correctly add auxiliary function or constants to my code](#), [my PC goes to the first line of code](#), [how do I apply the correct register conventions](#).