upGrad Coding Console Walkthrough

Types of coding assessments

There are two types of coding assessments on the upGrad learning platform:

- 1) In-module coding questions
- 2) Timed assessments comprising multiple coding questions

Common to All Coding Questions

Test Cases

- Sample test cases (non-hidden test cases): These test cases are visible to learners once they verify with the code. The logic of the program is tested against these test cases. Depending on whether these test cases pass or not, learners can make changes to their code to get the desired output.
- 2. Non-sample test cases (hidden test cases): These test cases are not visible to learners. Each coding question will generally have at least one non-sample test case and for any graded question, the final score in the question in only evaluated basis the number of non-sample test cases passed. Sample test cases have no contribution to the final score. They are present just to check the sanity of your code. Non-sample test cases are generally not visible to learners to restrict students from getting the expected output through hard-coding.

Note: In cases where coding questions are evaluative in nature, marks are awarded only on successful execution and acceptance of non-sample test cases.

1. In-module coding questions

For all coding questions, three features are available on the do-select platform to help students write and test their code (both the syntax and the logic of the program). These three features are:

- a) Run
- b) Verify
- c) Submit

Run

The run option checks for any syntactical, runtime, or execution error present in the written code. You can learn about the different types of errors here. If the code runs successfully

without throwing any of the aforementioned errors, the console prints a message "Code Execution Successful!" as shown in the screenshot below.

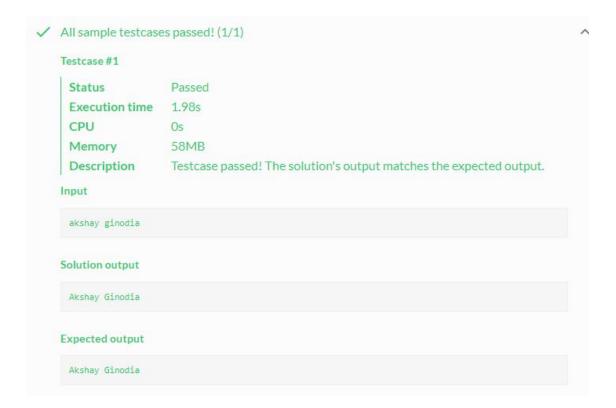
Please note that Run option does not check for the program logic or output against the test cases (neither sample nor non-sample), and hence, its successful execution is nowhere related to the evaluation of the code.



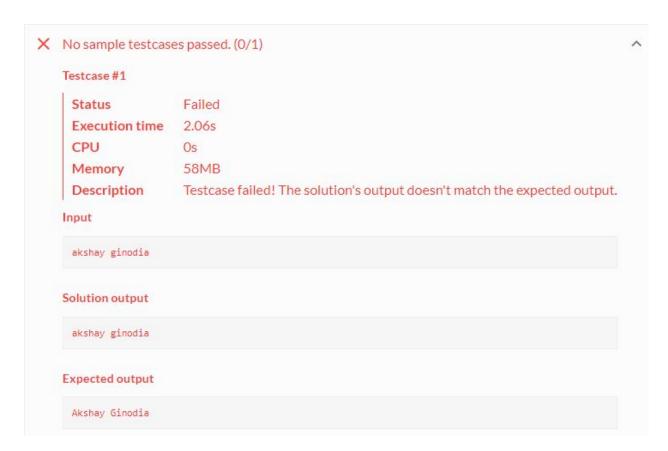
Verify

The verify option checks the code against the sample test cases available on the coding console. It also prints the input along with the expected output and the output as produced by the learner's code.

If all the test cases pass successfully, a screen prompting "All sample test cases passed!" will appear (something similar to the screenshot shown below):



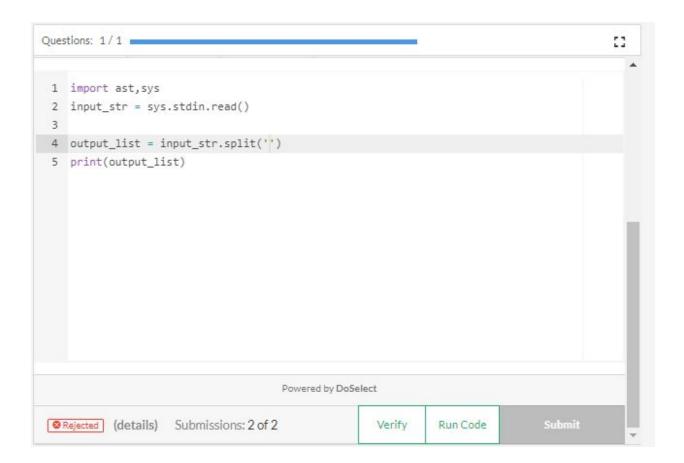
However, in case the output is not as expected, the system prints "No sample test cases passed" along with the details (as shown in the screenshot below):



Please note that the Verify option only validates the code against the sample test cases, and hence, it does not directly imply that the code will finally be accepted when submitted.

Submit

The Submit option validates the code against both sample and non-sample test cases. If both sample and non-sample test cases yield the expected output, i.e., if the test cases pass successfully, the code is accepted. Else, the code will be in the rejected state. The screenshot below is a sample of a code in the rejected state:



When you click on the "details" option (in case the code is rejected), you will be able to see the failed test cases. But the details of these test cases won't be mentioned as it might lead to hard coding by some students.

If the code is partially correct, marks will be awarded depending on the number of non-sample test cases passed successfully.

Please note that if there is no non-sample test case, on submission, the code will remain in the submitted state and is neither accepted nor rejected.

How does the evaluation engine work?

Evaluation is done character by character in the console. A mismatch of even a character will prevent the expected output and will throw an error.

For the non-sample test cases, the evaluation is done at the backend.

2. Timed assessments coding question

In a timed assessment, the submit button is triggered as soon as the test ends. Initially, you can verify and run the code. You can submit all the questions upon completion at one go.