

Lesson Plan 1.05: Quiz & Debugging ## Learning Objectives Students will be able to... * Demonstrate their understanding of key concepts covered up to this point * Define and identify: **debugging, syntax errors** * Analyze and respond to error messages ## Materials/Preparation * Download quiz and Answer key(access protected resources by clicking on "Additional Curriculum Materials" on the [TEALS Dashboard]) * [Associated Readings 1.3](https://tealsk12.gitbook.io/intro-cs-2/readings#1-3) * Take the quiz * After taking the quiz yourself, take a look at the answer key provided in the additional curriculum materials. * Create a scoring rubric * Look through [http://tinyurl.com/TEALS-Python-Errors] web tutorial to dig deeper yourself into analyzing and responding to errors ## Pacing Guide | **Duration** | **Description** | |-----:|:-----| | 5 Minutes | Welcome and Review | | 25 Minutes | Quiz | | 25 Minutes | Debugging Activity | ## Instructor's Notes ### 1. Welcome and Review * Ask students for any final questions before passing out the quiz. ### 2. Quiz ### 3. Debugging Activity * Explain to students that you will now be exploring how to read analyze and respond to errors in code. * Ask students to read through it and predict what will be printed out. ```Python favorite_number_str = input("What is your favorite number: ") birth_month_str = input("What month where you born in: ") lucky_number = int(favorite_number_str) + int(birth_month_str) print("Your lucky number is " + lucky_number) ``` * Remind students that when reading through code we go line by line, as if we are the interpreter. ##### Demonstration * Run the code, display the stack trace, and have students analyze the error message reported. * Explain that, much like in Snap, **debugging** is the process of tracking and fixing errors in your code. * Indentation Errors: Errors the students are most likely to have seen * "IndentationError: unindent does not match any outer indentation level" * Ask student why these errors are caused and how they find/fix this type of error? Suggest using the tab key to indent and the shift-tab to remove an indent as ways to avoid the error. * Direct students to work through and complete this web tutorial on [debugging] ### Accommodation/Differentiation Make sure to provide extended time on the quiz for any students who need extra time ## Forum discussion [Lesson 1.05: Quiz and Debugging (TEALS Forums Account Required)] (https://forums.tealsk12.org/c/2nd-semester-unit-1/1-05-quiz-debugging) [TEALS Dashboard]: http://www.tealsk12.org/dashboard [http://tinyurl.com/TEALS-Python-Errors]: http://interactivepython.org/runestone/static/thinkcspy/Debugging/KnowyourerrorMessages.html [debugging]: http://interactivepython.org/runestone/static/thinkcspy/Debugging/toctree.html [example code]: #code-example