Lesson 4.05: Debugging and Quiz ## Learning Objectives Students will be able to... * Read and understand longer programs involving loops * Demonstrate their knowledge of looping, lists, and nested loops/lists * Debug programs involving for loops and lists ## Materials/Preparation * Quiz (access protected resources by clicking on "Additional Curriculum Materials" on the [TEALS Dashboard]) * [Lab - Debugging Practice] ([printable lab document]) ([editable lab document]) * [Coding Example] * Read through the quiz, lesson, and lab so that you are familiar with the requirements and can assist students * Go through the quiz and create an answer key & scoring rubric ## Pacing Guide | **Duration** | **Description** | | ---------- | ----------- | | 25 Minutes | Quiz | | 10 Minutes | Lesson | | 20 Minutes | Lab | | 5 Minutes | Debrief | ## Instructor's Notes ### 1. Quiz * Have students start working on the Quiz. ### 2. Lesson * Talk about how to read code in a loop (you can use something of your choice or the provided [Coding Example]) * Go over debugging practices for loops. * Use print statements throughout the code to show where error is. * Alter input to make sure body of loop is working correctly. * Make sure lists don't go out of bounds/past the end of the list. ### 3. Lab * This lab will have students start by reading code and looking for errors while **not** at the computer. * After reading through the code they can practice the debugging practices mentioned on the computer to correct the programs. ### 4. Debrief * Discuss as a class what was most helpful in debugging, highlight those practices throughout the upcoming project. ## Accommodation/Differentiation Make sure to provide extended time on the quiz for any students that have that requirement in an IEP or 504 plan. ## Forum discussion [Lesson 4.05: Debugging and Quiz (TEALS Discourse Account Required)](https://forums.tealsk12.org/c/unit-4-looping/lesson-4-05-debugging-and-quiz) [TEALS Dashboard]:http:/www.tealsk12.org/dashboard [Lab - Debugging Practice]: lab.md.html [Coding Example]: https://teals-introcs.gitbooks.io/2nd-semester-introduction-to-computer-science-pri/content/units/4_unit/05_lesson/longer_coding_sample.py [printable lab document]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/4_unit/05_lesson/lab.pdf [editable lab document]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/4_unit/05_lesson/lab.docx