# CR Task 8.2 Debug This — Report

## Part 1: Debugging the code yourself

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*Repeat the table as needed for each issue described in the task. Try a variety of interactions with the program (which should be different to the examples shown in the task). When including a transcript of the relevant part your interaction with the program format your input in* ***bold****.*

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| --- | --- |
| **Issue:** | random\_sequence() function is not defined |
| **Program transcript or summary of its behaviour: (format user input in bold)** |  |
| **Defective line number(s):** | 62 |
| **Summary of the cause:** | random\_sequence() function was not imported from utils.py |
| **How cause was identified:** | Because I’d turned on the Pylance plugin’s Type Checking to on, I discovered an error shown on the call to random\_sequence() |
| **Replacement code:** | from util import random\_sequence |

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| **Issue:** | print\_then\_pause() function is not defined |
| **Program transcript or summary of its behaviour: (format user input in bold)** |  |
| **Defective line number(s):** | 76 |
| **Summary of the cause:** | Wrong function name |
| **How cause was identified:** | Because I’d turned on the Pylance plugin’s Type Checking to on, I discovered an error shown on the call to print\_then\_pause() |
| **Replacement code:** | print\_n\_pause(f"\n{who}: {what}", 0.5) |

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| **Issue:** | show\_random\_menu() function is not defined |
| **Program transcript or summary of its behaviour: (format user input in bold)** |  |
| **Defective line number(s):** | 89 |
| **Summary of the cause:** | Wrong function name |
| **How cause was identified:** | Because I’d turned on the Pylance plugin’s Type Checking to on, I discovered an error shown on the call to show\_random\_menu() |
| **Replacement code:** | comeback = display\_random\_menu(COMEBACKS) |

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| **Issue:** | IndexError: list index out of range |
| **Program transcript or summary of its behaviour: (format user input in bold)** |  |
| **Defective line number(s):** | 86 |
| **Summary of the cause:** | speak(PIRATE, INSULTS[insult]) was trying to get the insult:int but as it was from 0 to 6 and when the random int choose 6 it became out of index as the INSULTS list has value from 0 to 5 (6 in total) |
| **How cause was identified:** | After I ran the program and played a few times, the game crashed when it was supposed to give me PIRATE’s insult |
| **Replacement code:** | insult: int = random.randint(0, len(INSULTS) - 1) |

*Paste additional copies of the table for each of the four issues*

## Part 2: Asking ChatGPT to identify errors without additional information

Provide the *original* versions of the two files (sword\_fighting and util) to [ChatGPT](https://chat.openai.com/chat) with a simple prompt asking it to identify errors present in the code. Your prompt will probably need to be two-parts so you can give it the contextual information that the code from util.py is from a source file named util.py. Don’t engage in a long conversation to give it any additional guidance beyond that. Complete the following table with details of what you gave it, what it responded, and your brief analysis of its success (or not).

|  |  |
| --- | --- |
| **ChatGPT version (3.5 or 4):** | GPT4 |
| **Initial prompt, including the code:** | Indentify errors in short and concise manner  (both the code at once) |
| **Its response:** | 1. **Incorrect function call:**    * random\_sequence(...) used in display\_random\_menu() but not imported.    * Fix: Add from util import random\_sequence or from util import \*. 2. **Incorrect function name:**    * show\_random\_menu(COMEBACKS) in attack\_parry() does not exist.    * Fix: Should be display\_random\_menu(COMEBACKS). 3. **Out-of-bounds error:**    * random.randint(0, len(INSULTS)) can return an index equal to len(INSULTS) (invalid).    * Fix: Use random.randint(0, len(INSULTS) - 1). 4. **Spelling:**    * “Lets start your training...” → missing apostrophe.    * Fix: "Let's start your training..." |
| **Your analysis of its recommendations (aim for 4–5 sentences):** | It caught most of the important issues, like the incorrect function call to show\_random\_menu(), the random.randint() index error, and the missing import for random\_sequence(). It also noticed a typo in one of the print messages. However, it missed a key issue I had already found - the function print\_then\_pause() doesn’t exist and should be print\_n\_pause(). While its suggestions were mostly accurate, they didn’t cover everything. |