# AI ASSISTED CODING - ASSIGNMENT - 7

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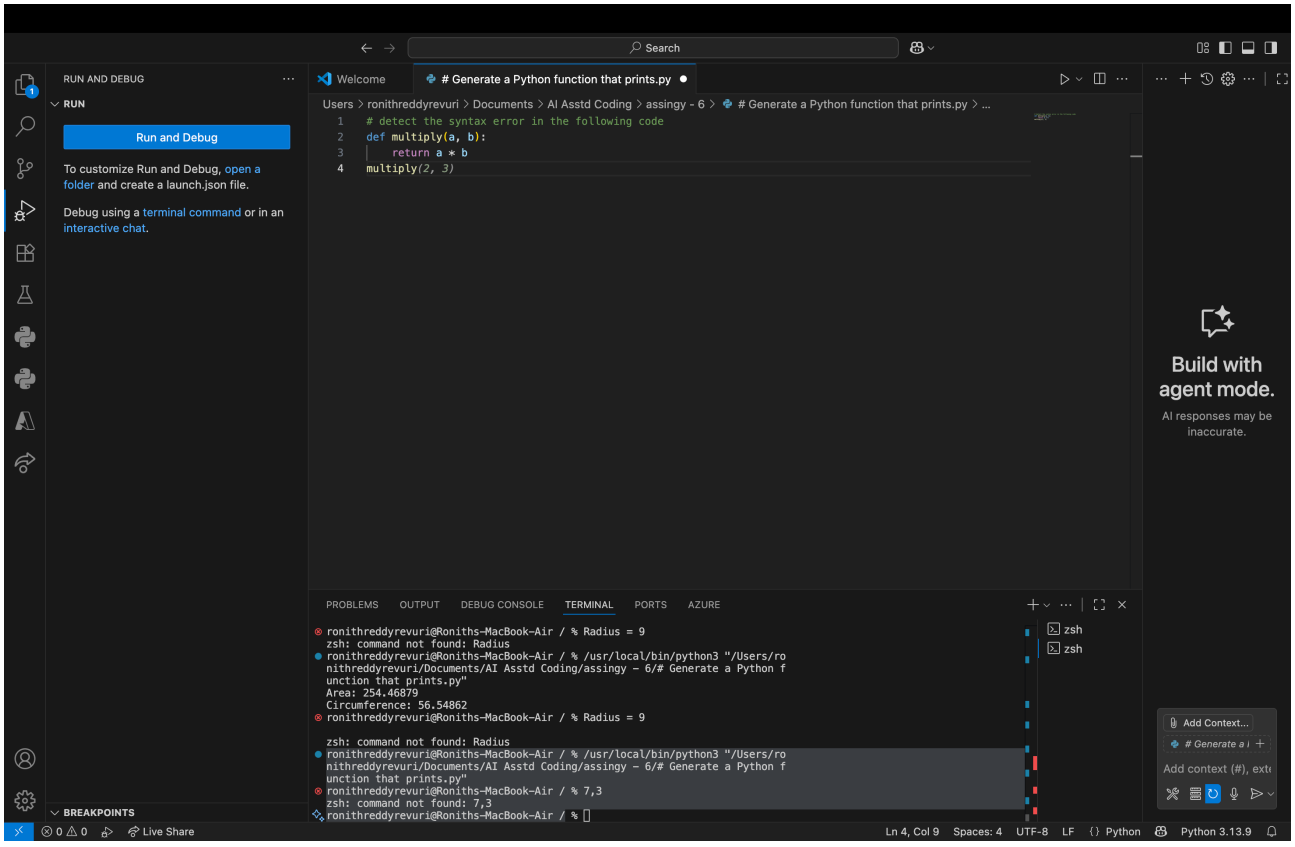
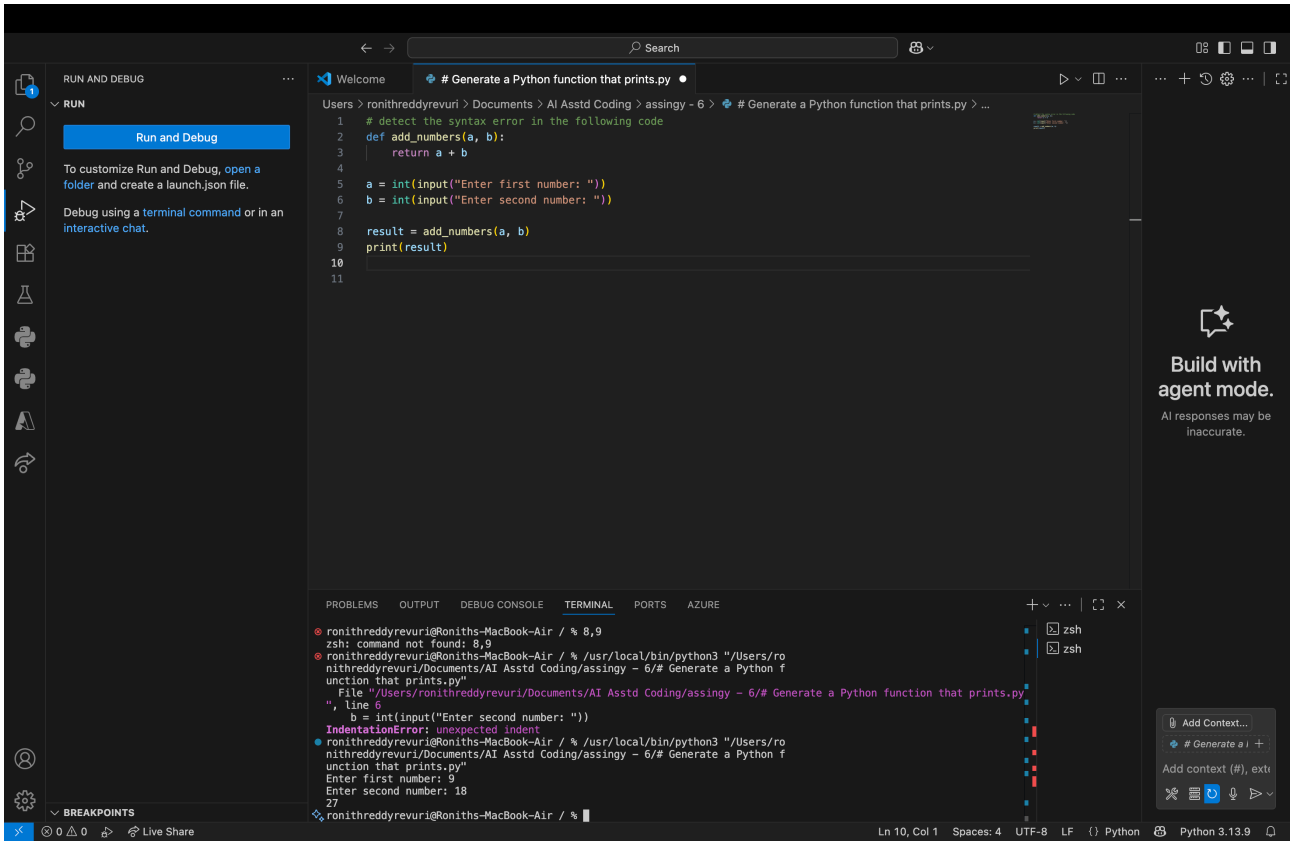
## TASK - 1 : FIXING SYNTAX ERRORS SCENARIO

**PROMPT :**
**DETECT THE SYNTAX ERRORS**



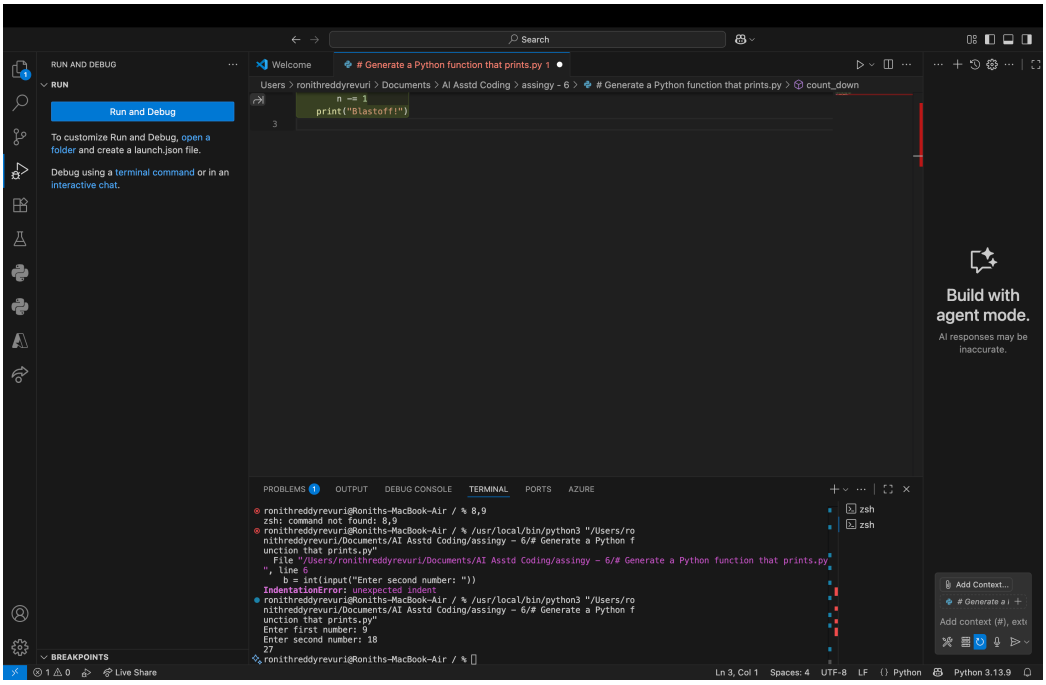



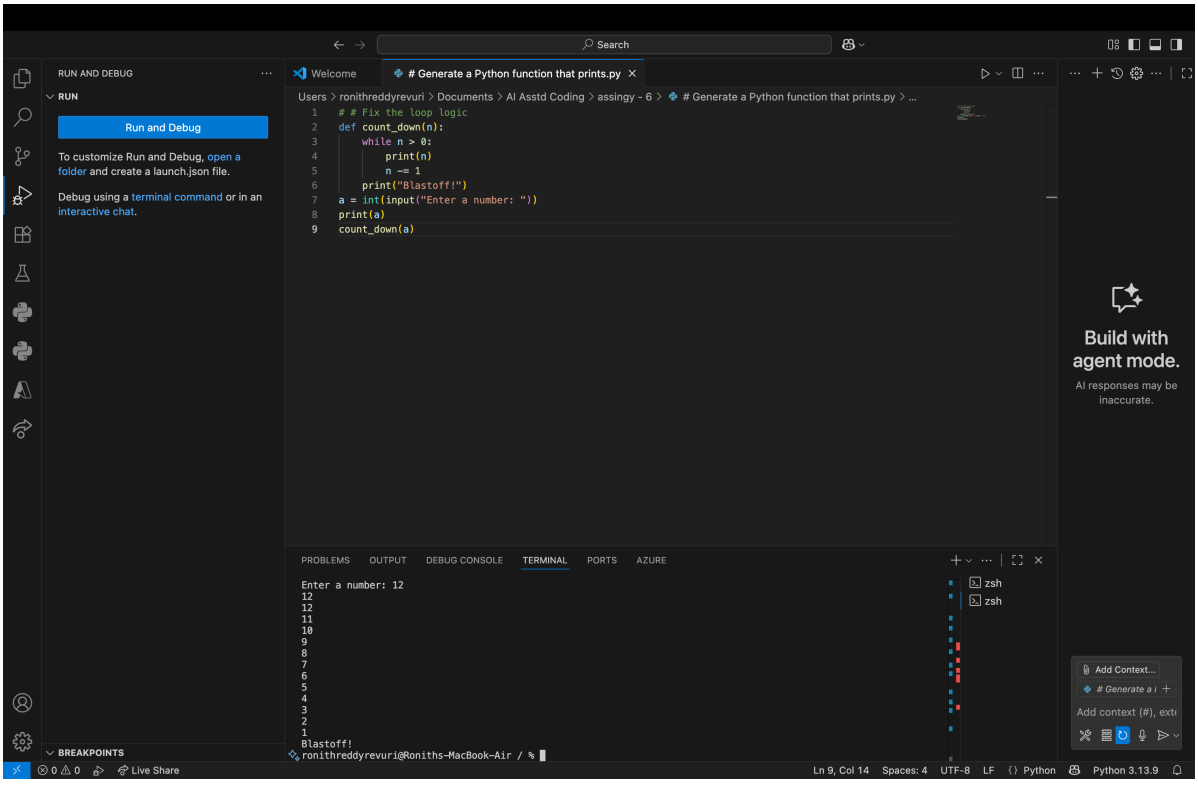
**EXPLANATION:**

**THE ERROR HAPPENED BECAUSE `RETURN` WAS WRITTEN OUTSIDE THE FUNCTION, WHICH PYTHON DOESN'T ALLOW. THERE WAS ALSO A SMALL INDENTATION MISTAKE. ONCE THESE WERE FIXED AND THE CODE WAS PROPERLY STRUCTURED, THE PROGRAM WORKED AS EXPECTED.**

## TASK - 2 : DEBUGGING LOGIC ERRORS IN LOOPS

## PROMPT : FIX THE LOOP LOGIC

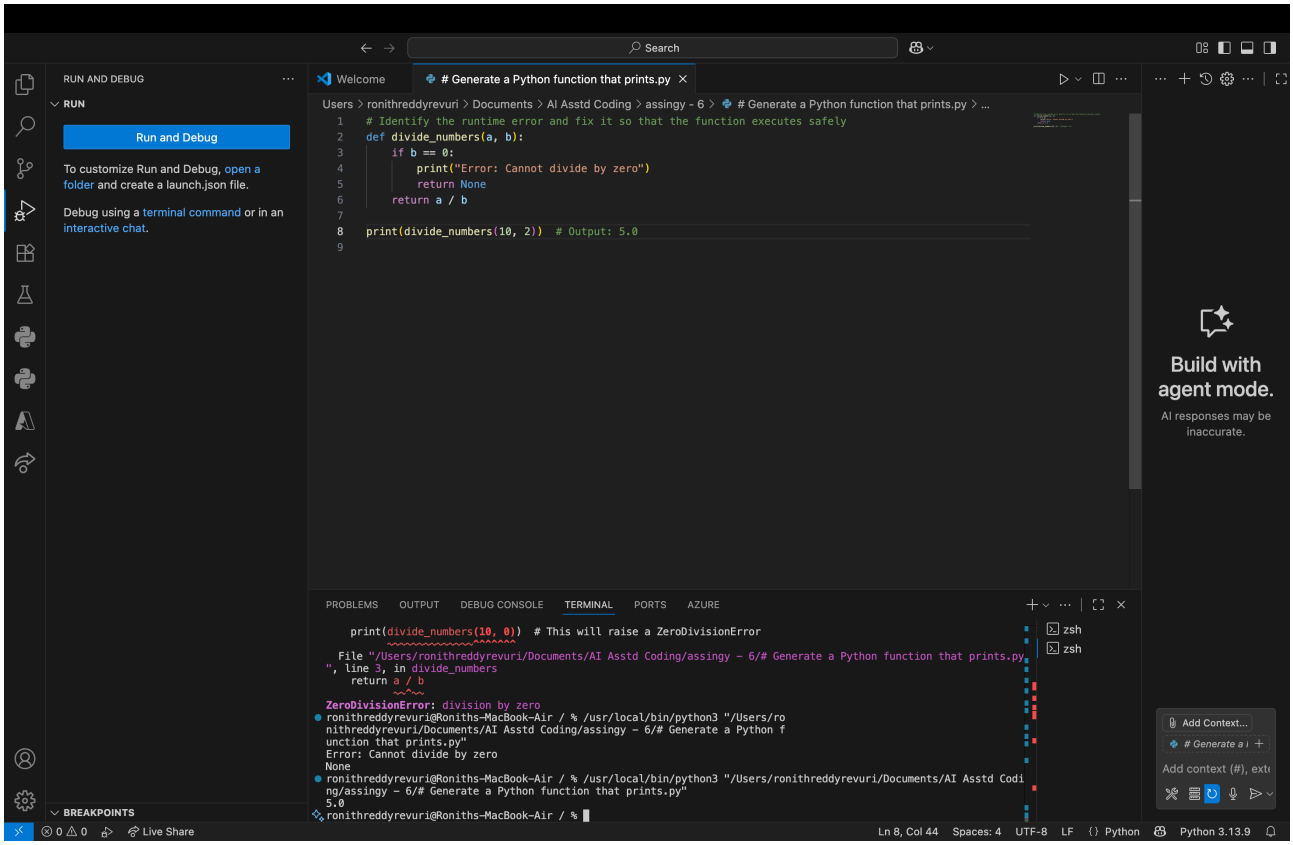


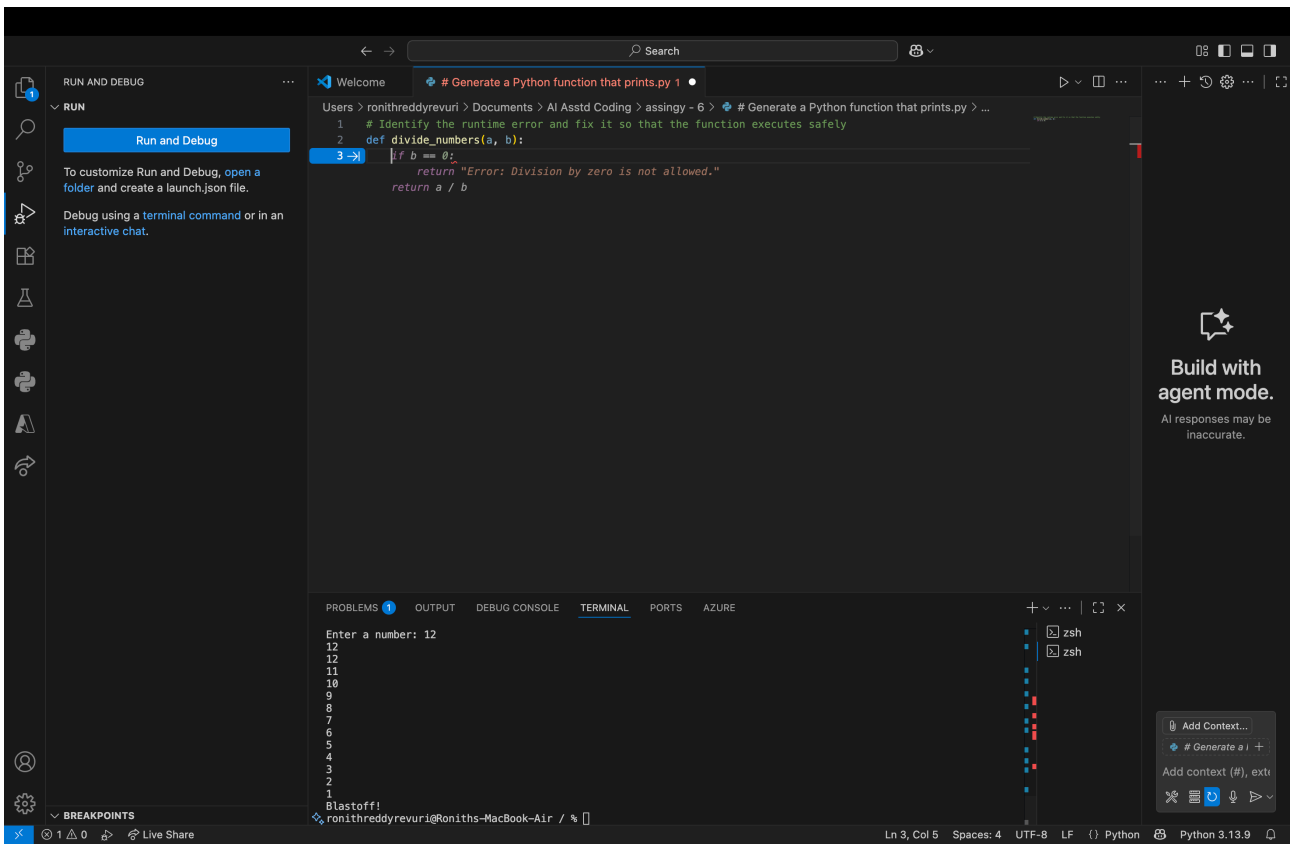



**EXPLANATION:**
**THE LOOP WAS RUNNING INFINITELY BECAUSE THE VALUE WAS INCREASING INSTEAD OF DECREASING. SINCE THE CONDITION NEVER BECAME FALSE, THE LOOP NEVER STOPPED. BY DECREMENTING THE VALUE CORRECTLY, THE LOOP NOW ENDS AS EXPECTED.**

**TASK - 3 : HANDLING RUNTIME ERRORS (DIVISION BY ZERO)**

**PROMPT : IDENTIFY THE RUNTIME ERROR AND FIX IT SO THAT THE FUNCTION EXECUTES SAFELY**

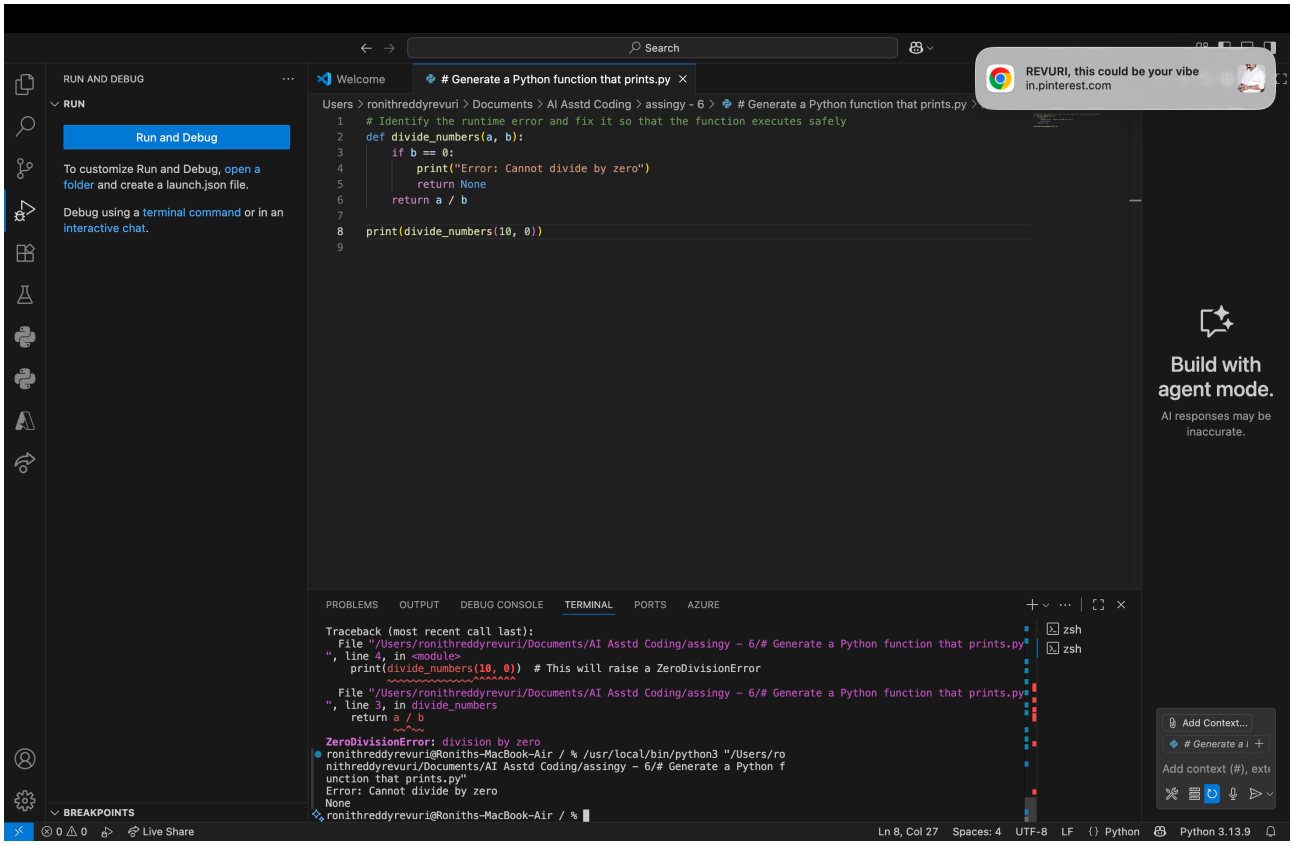


**EXPLANATION :**
**THE ERROR OCCURRED BECAUSE DIVISION BY ZERO IS NOT PERMITTED IN PYTHON. BY CHECKING THE DIVISOR BEFORE PERFORMING THE OPERATION, THE FUNCTION AVOIDS CRASHING AND EXECUTES SAFELY.**

**TASK - 4 : DEBUGGING CLASS DEFINITION ERRORS**

**PROMPT :**
**# IDENTIFY THE ISSUE IN THE __INIT__ CONSTRUCTOR AND CORRECT THE CLASS DEFINITION**

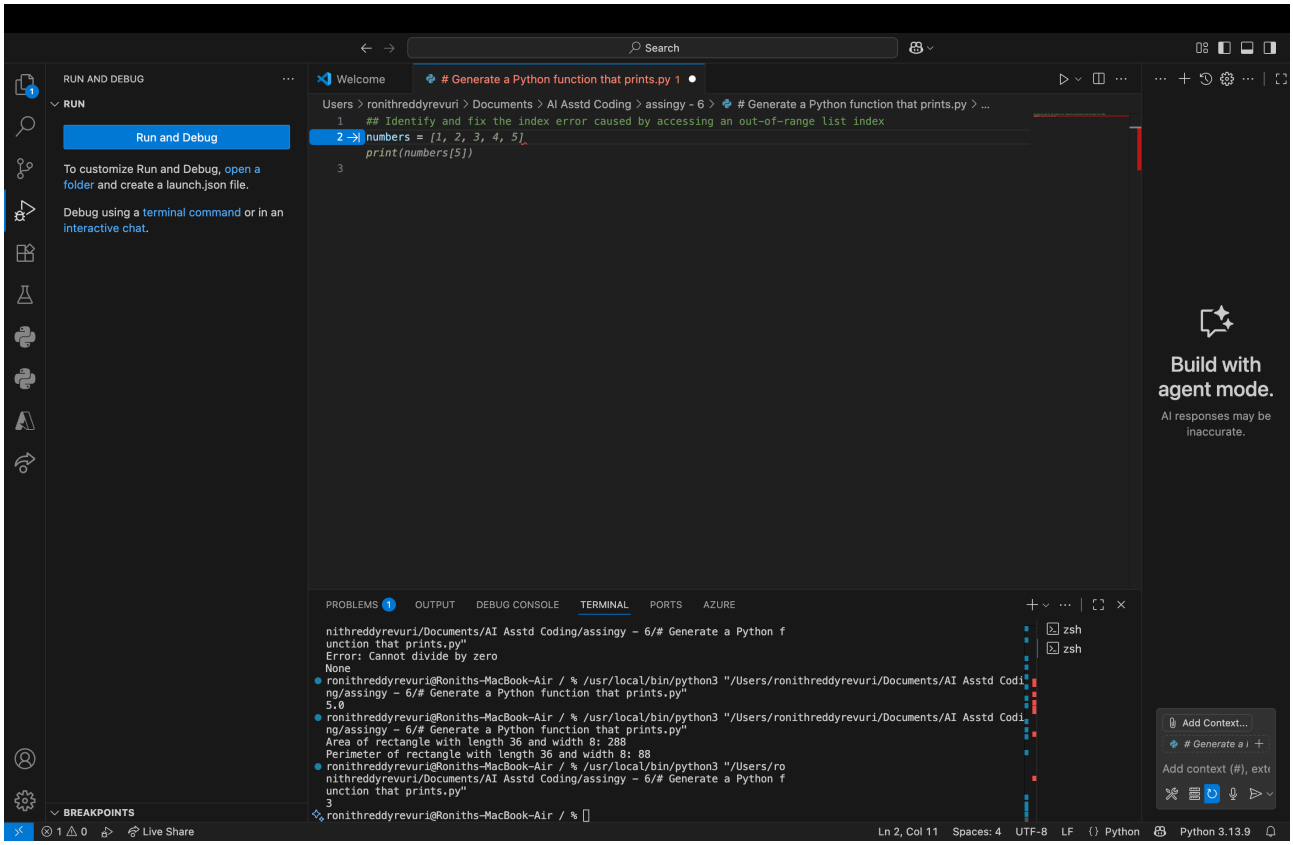


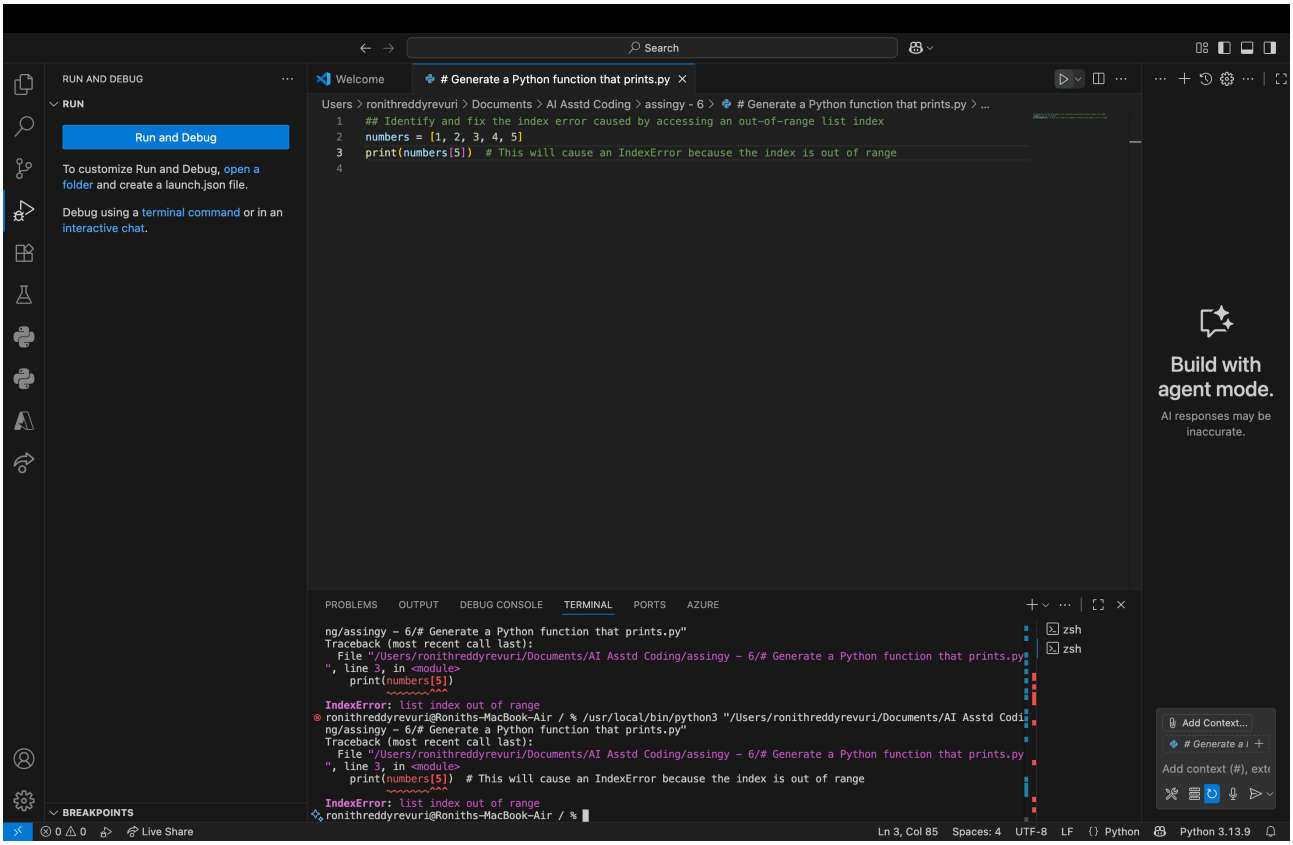

**EXPLANATION :**

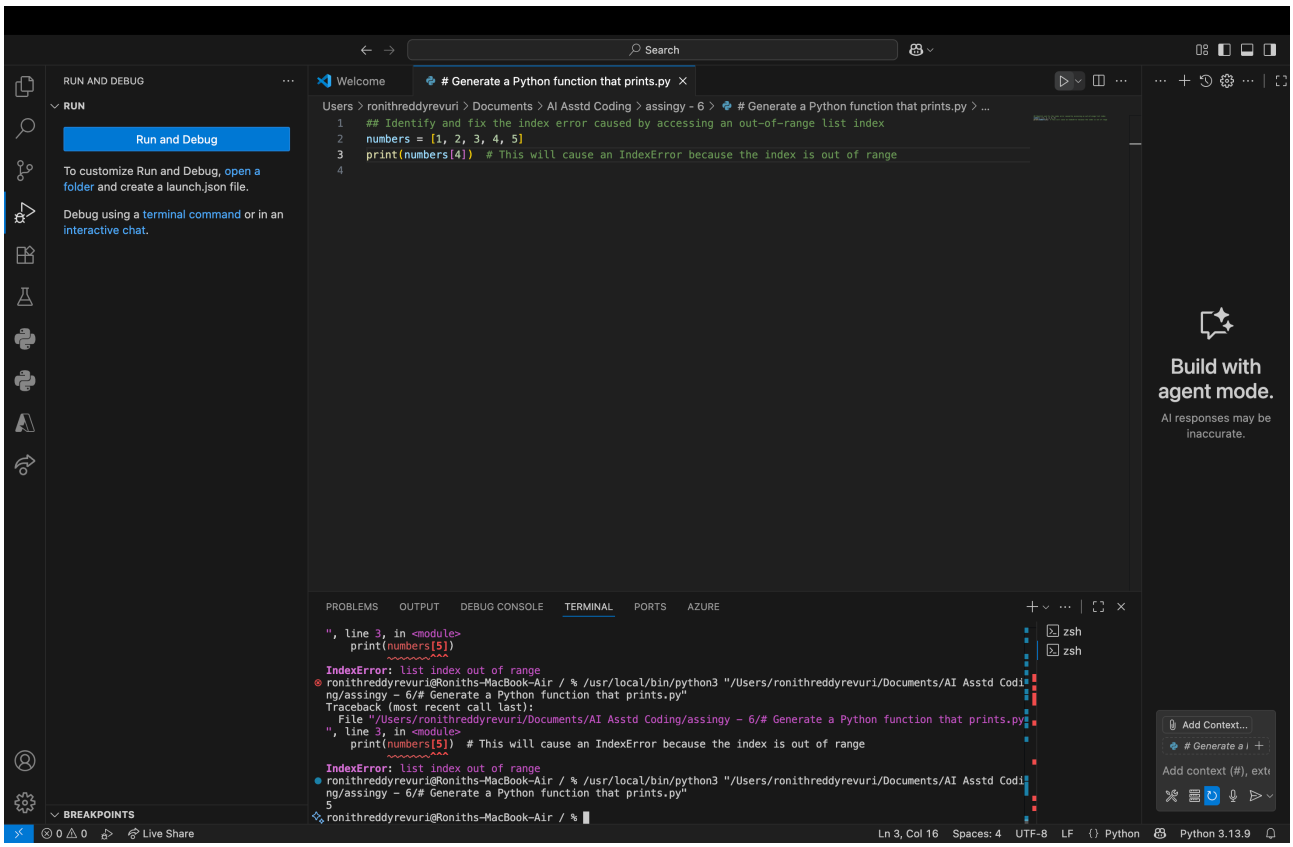
**THE CONSTRUCTOR WAS MISSING THE `SELF` PARAMETER, WHICH IS REQUIRED TO ACCESS OBJECT VARIABLES. ADDING `SELF` FIXES THE CLASS DEFINITION AND ALLOWS THE OBJECT TO STORE VALUES PROPERLY.**

## TASK - 5 : RESOLVING INDEX ERRORS IN LISTS

## PROMPT :
## # IDENTIFY AND FIX THE INDEX ERROR CAUSED BY ACCESSING AN OUT-OF-RANGE LIST INDEX






**EXPLANATION :**

**THE ERROR OCCURRED BECAUSE THE PROGRAM TRIED TO ACCESS A LIST INDEX THAT DOES NOT EXIST. BY ACCESSING A VALID INDEX OR CHECKING THE LIST LENGTH, THE PROGRAM RUNS WITHOUT CRASHING.**

**CONCLUSION :**

**THIS LAB SHOWS HOW AI TOOLS CAN HELP IDENTIFY AND FIX SYNTAX, LOGIC, AND RUNTIME ERRORS IN PYTHON PROGRAMS IN A CLEAR AND SYSTEMATIC WAY.**