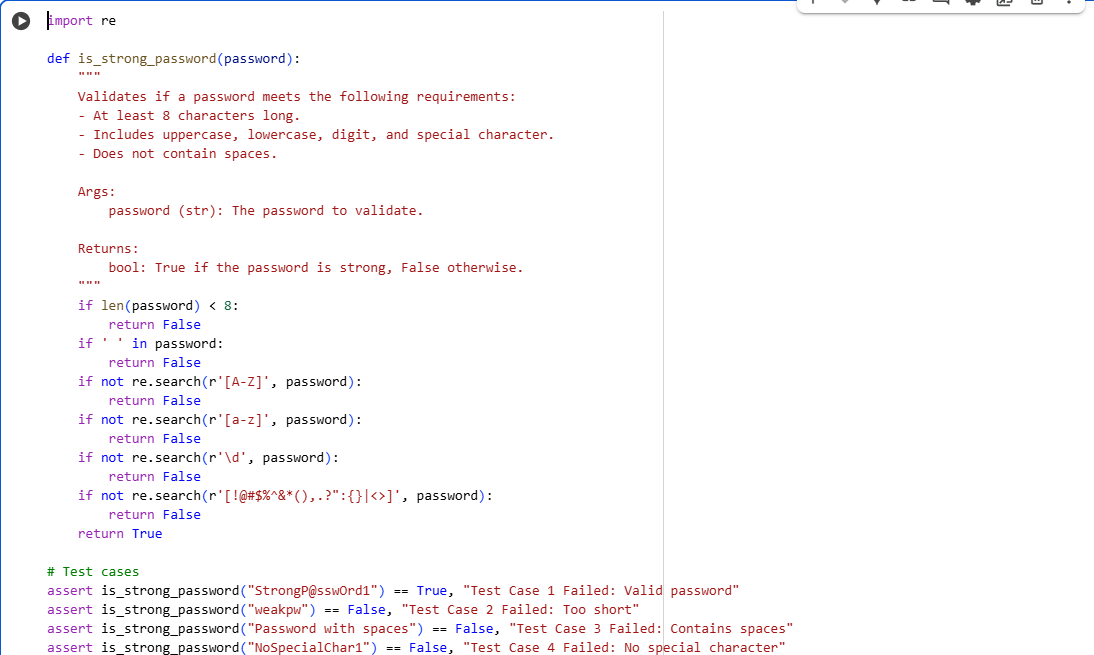
AI LAB ASSIGNBMENT 8.1:

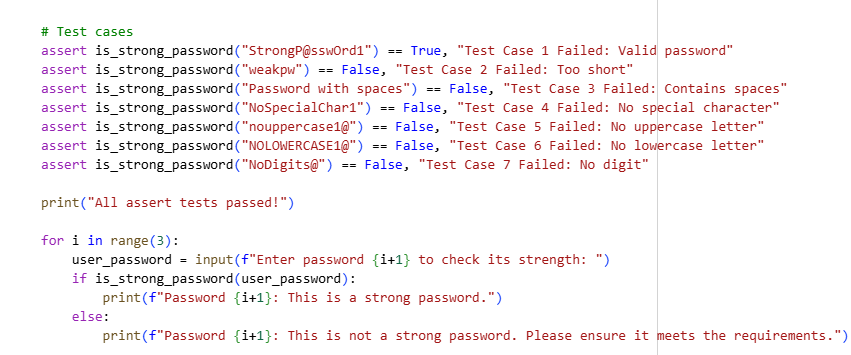
**NAME:M.VARSHITHA**

**: HALLTICKET NO:2403A52342**

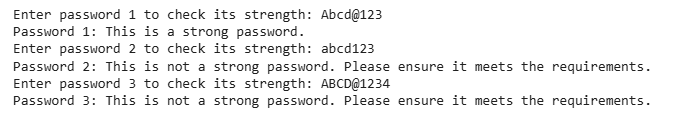
**TASK 1**

write a python program to generate at least 3 assert test cases for is\_strong\_password(password) and implement the validator function. • Requirements: o Password must have at least 8 characters. o Must include uppercase, lowercase, digit, and special character.take user input o Must not contain spaces.Take 3 inputs

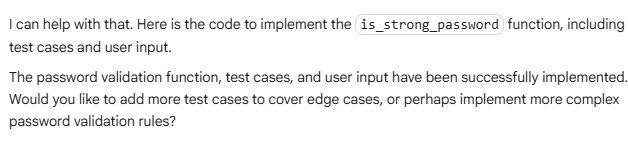




OUPUT:



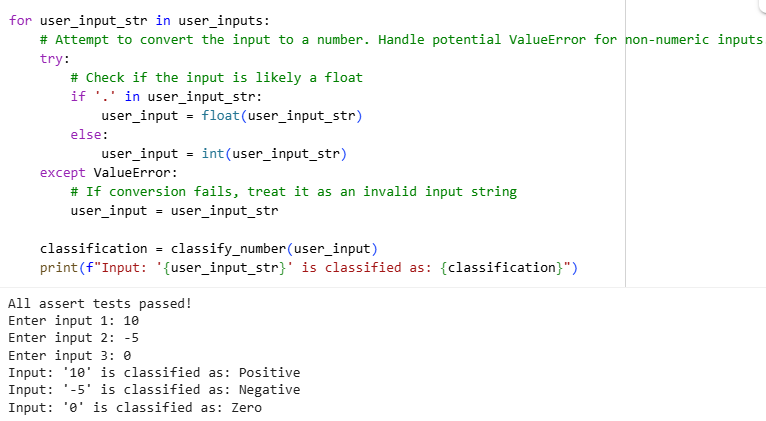
EXPLANATION:



TASK 2:

write a python program to generate at least 3 assert test cases for a classify\_number(n) function. Implement using loops. • Requirements: o Classify numbers as Positive, Negative, or Zero. o Handle invalid inputs like strings and None. o Include boundary conditions (-1, 0, 1).take 3 user inputs





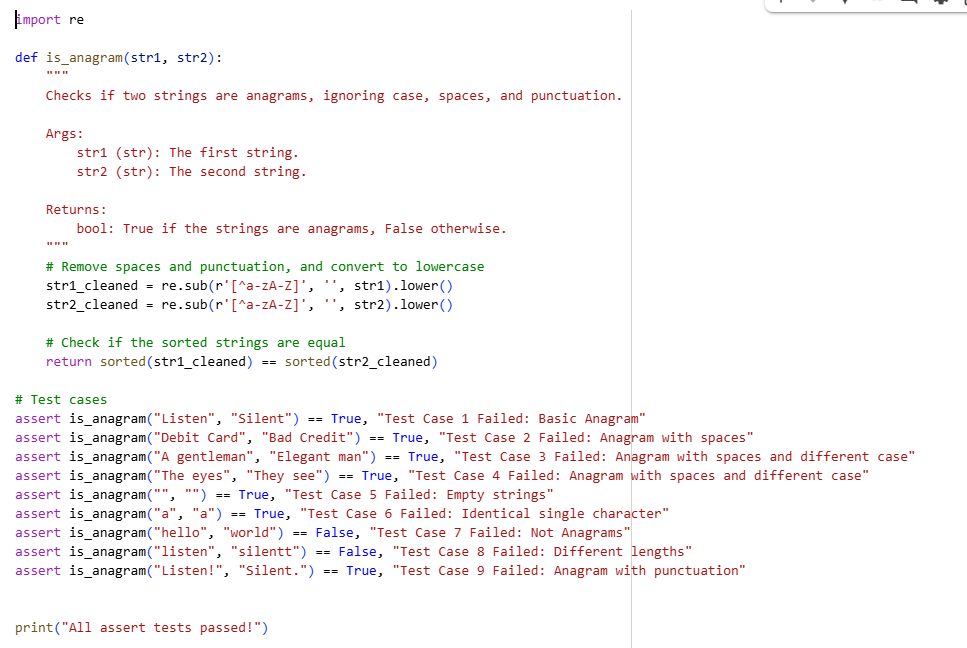
EXPLANATION:

A screenshot of a computer

AI-generated content may be incorrect.

TASK 3:

write a python program to generate at least 3 assert test cases for is\_anagram(str1, str2) and implement the function. • Requirements: o Ignore case, spaces, and punctuation. o Handle edge cases (empty strings, identical words).take user 3 inputs



A screenshot of a computer program

AI-generated content may be incorrect.

OUTPUT:

A white text with black text

AI-generated content may be incorrect.

EXPLANATION:

A screenshot of a white page

AI-generated content may be incorrect.

TASK 4:

write a python program to generate at least 3 assert-based tests for an Inventory class with stock management. • Methods: o add\_item(name, quantity) o remove\_item(name, quantity) o get\_stock(name).inv = Inventory() inv.add\_item("Pen", 10) assert inv.get\_stock("Pen") == 10 inv.remove\_item("Pen", 5) assert inv.get\_stock("Pen") == 5 inv.add\_item("Book", 3) assert inv.get\_stock("Book") == 3.take 3 user inputs

A screenshot of a computer program

AI-generated content may be incorrect.

OUTPUT:

A white text with black text

AI-generated content may be incorrect.

EXPLANATION:

A screenshot of a white box

AI-generated content may be incorrect.

TASK 5:

write a python program to generate at least 3 assert test cases for validate\_and\_format\_date(date\_str) to check and convert dates. • Requirements: o Validate "MM/DD/YYYY" format. o Handle invalid dates.take 3 user inputs o Convert valid dates to "YYYY-MM-DD".Take 3 user inputs.

A screenshot of a computer

AI-generated content may be incorrect.

OUTPUT:

A screenshot of a computer

AI-generated content may be incorrect.

EXPLANATION:

A screenshot of a computer program

AI-generated content may be incorrect.