

Assignment 6. Blackbox Testing

Due: 5/17(Friday), 6pm

Spring 2024

1. We wish to test the following program.

- ❑ The program accepts 2 non-empty strings and determines which string has a lower number of vowel characters; a, e, i, o, and u.

- ❑ Example

When 'Sun' and 'Special' are entered, the program prints 'Sun'.

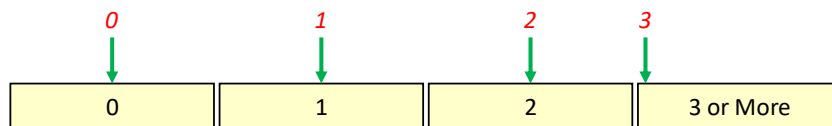
When both strings have the same lengths of vowels, the program prints '=='

2. Apply Blackbox Testing.

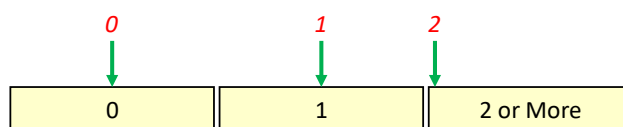
- ❑ Define the criteria, i.e. the basis, for applying partitioning. (0 points)

- Criteria #1. Number of Input Strings
- Criteria #2. Length of a String
- Criteria #3. Number of vowels in a String

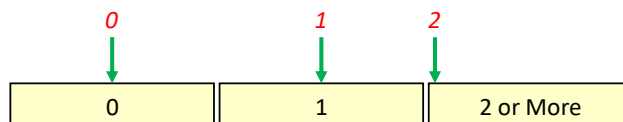
Criteria #1. Number of Input Strings



Criteria #2. Length of a String



Criteria #3. Number of Vowels in a String



- ❑ Define partitions for each criterion. (1 points)

- Partitions for Criteria #1. Number of Input Strings
 - Number of Input Strings = 1
 - ...
 -
- Partitions for Criteria #2. Length of a String

Software Engineering Practices

- Length of a String = 0, i.e. Null String
 - ...
 -
 - Partitions for Criteria #3. Number of Vowels in a String
 - Number of Vowels in a String = 0
 - ...
- ❑ **Derive test cases from the partitions.** Consider inter-criteria dependency.
Use the following format in writing test cases. Fill in only the white spaces. (2 points)

Test Cases	String #1	String #2	Expected Output	Actual Output
#1				
#2				
#3				
#...				
...				
Total # of Test Cases		() =		

- ❑ **Compute the total number of test cases** in the table of test cases. Show formula and the total. (2 points).

3. Submission Guidelines

- ❑ **Use a software tool to draw the diagrams.**

Hand-drawn diagrams are NOT accepted.

- ❑ **Keep the due date and time.**

Late assignments are NOT accepted.

- ❑ **Submit your solution on the smart campus site**

- ❑ **Submit your assignment solution in PDF file.**

Assignments in other formats are NOT accepted.

Use this filename convention for your submission; **SE.A##.홍길동.pdf.**
where ## is the as the assignment number in 2 digits.

- ❑ **No Plagiarism**

- Submit your original work. No Plagiarism please!