## CSC108H Winter 2023 Worksheet: Code reading and docstrings

Complete the examples calls and then write a docstring description for each function. (If you get stuck, read the flip-side of this page for hints.)

```
(a) def function_a(s1: str, s2: str) -> bool:
       >>> function_a(
                                                       )
       True
                                                       )
       >>> function_a(
       False
        11 11 11
       return s1 in s2 and s2 in s1
(b) def function_b(s1: str, s2: str) -> bool:
       >>> function_b(
                                                       )
       True
                                                       )
       >>> function_b(
       False
        11 11 11
        return s1[0] == s2[0] and s1[-1] == s2[-1]
(c) def function_c(s1: str, s2: str) -> bool:
       >>> function_c(
                                                       )
        True
       >>> function_c(
                                                       )
       False
        11 11 11
       return min(len(s1), len(s2)) == len(s1)
(d) def function_d(s1: str, s2: str) -> bool:
       >>> function_d(
                                                       )
                                                       )
       >>> function_d(
       False
        return s1[0] == s1[-1] or s2[0] == s2[-1]
(e) def function_e(s1: str, s2: str) -> bool:
                                                       )
       >>> function_e(
        True
       >>> function_e(
                                                       )
       False
       return str(len(s1)) in s2
```

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(i) Match each docstring description to the function it describes. Note that "iff" stands for "if and only if".

1. function : Return True if and only if s1 and s2 have the same first character and

s1 and s2 have the same last character.

 $2. \ \, \text{function}\_ \qquad : \ \, \text{Return True if and only if the number representing the length of s1}$ 

occurs in s2.

 $3. \; {\tt function}_- \; : {\tt Return \; True \; if \; and \; only \; if \; the \; first \; and \; last \; characters \; in \; s1 \; are \; the \; in \; s2 \; are \; s2 \; are \; s2 \; are \; s2 \; are \; s3 \; are \; s4 \; are$ 

same, the first and last characters in s2 are the same, or both.

4. function\_ : Return True if and only if s1 and s2 are the same string.

 $5. \ {\tt function}_{\tt -}$  : Return True if and only if the length of s1 is less than or equal to

the length of s2.

(ii) Which function(s) also need a precondition? Add the precondition(s).