

CSCA08H Winter 2022 Worksheet: Function Definitions

1. Function Definitions

- (a) Function `double` takes a number and returns twice its value. Finish the examples by writing the returned value. Then, write a `return` statement to complete the function definition:

```
def double(num: float) -> float:
    """Return twice the value of num.

    >>> double(7.0)

    >>> double(5.7)

    """
```

- (b) Function `our_maximum` takes two numbers and returns the larger of the two. Finish the examples by writing the returned value. Then, complete the function definition:

```
def our_maximum(num1: float, num2: float) -> float:
    """Return the larger of num1 and num2.

    >>> our_maximum(1.5, 2.5)

    >>> our_maximum(4.0, 3.7)

    """
```

- (c) Function `max_of_min` takes four values, `num1`, `num2`, `value1`, and `value2`, determines the minimum of `num1` and `num2`, the minimum of `value1` and `value2`, and returns the maximum of those minimums.

What value does `max_of_min(4.0, 3.7, 6.0, 3.5)` produce? _____

What value does `max_of_min(1.0, 1.7, 4.5, 3.0)` produce? _____

Use your responses above to fill in two examples in the docstring. Then, complete the function definition. If you like, you can use several statements.

```
def max_of_min(num1: float, num2: float, value1: float, value2: float) -> float:
    """Return the maximum of the minimums of the pairs num1 and num2,
    and value1 and value2.

    >>>

    >>>

    """
```