

C4M Homework: Homework: Week 2 Level 2

Please submit your solutions to these problems on MarkUs at <https://markus.cdf.toronto.edu/c4m2-2016> using your UTORID to authenticate.

1. Complete the following function according to its docstring. Make sure to test it.

```
def count_non_digits(s):
    """ (str) -> int

    Return the number of non-digits in s.

    >>> count_non_digits('abc12d')
    4
    >>> count_non_digits('135')
    0
    >>> count_non_digits('A.4')
    2
    """
```

2. Complete the following function according to its docstring. Make sure to test it.

```
def password_is_valid(passwd):
    """ (str) -> bool

    A strong password has a length greater than or equal to 6, contains at
    least one lowercase letter, at least one uppercase letter, and at least
    one digit. Return True iff passwd is considered strong.

    >>> check_password('I<3csc108')
    True
    """
```

3. Complete the following function according to its docstring. Make sure to test it.

```
def first_even(items):
    """ (list of int) -> int

    Return the first even number from items. Return -1 if items contains no even numbers.

    >>> first_even([5, 8, 3, 2])
    8
    >>> first_even([7, 1])
    -1
    """
```

4. Write a function named `is_vowel` that takes a character string as a parameter and returns `True` if the character is a vowel and `False` otherwise. For the purposes of this question, we will assume that `y` is not a vowel. You may assume that the function will only be called on strings of length 1.
5. Write a function `remove_vowels` that takes a string as the only parameter and returns a string that is the same characters as the input string (in the same order) but all the vowels have been removed.

Here is one example: `remove_vowels("alphabet")` should return `"lphbt"`