NATIONAL UNIVERSITY
OF COMPUTER & EMERGING SCIENCES
PESHAWAR CAMPUS

Problem Set:	Assignment: AG04	**Semester**:	Fall 2017
Points:	*See autograder*		
Date Set:	*See autograder*	**Due Date**:	*See autograder*
Course:	CS101 Introduction to Computing	**Instructor**:	Dr. Nauman

1 Primes and Factors Part II

Since you are reading this, you have already downloaded and extracted the zip file.

1.1 Tasks to do

1. Open the file `a06.py` and look between the markers. You may ignore the code outside the markers completely.

   You may run the code by typing the following from the shell: `python a06.py`

   This will not run the tests but the code itself.

2. This is a continuation of the previous assignment. So, you might want to bring in some pieces from that assignment to this one.

   There are two main tasks to complete.

   (a) Write a function with the name `output_prime_factors` that takes in a number and outputs only prime factors of that number – one on each line. This function should be able to take in any positive number (real or integer) but in case of reals, it should round it first to the nearest integer before computing the factors.

   (b) The second function you need to write is `get_nth_prime`. This function will be given a number n as input. The function should find the n^{th} prime number. For example, if we pass the number 1 as input, the function should return 2. If we pass in 4 as input, it should return 7 since the prime numbers are: { 2, 3, 5, 7, ... } and 7 is the fourth one.

   If a float is passed to this function, it should simply return `None`.

3. You may change the values in function calls at the end of the file `a06.py` to check the functions.

4. Run local tests and if they pass, submit the assignment using the submission command given on the Autograder assignment page. (Same as the first assignment.)