INSTRUCTIONS

- You have 25 minutes to complete this quiz.
- The exam is closed book, closed notes, closed computer, closed calculator.
- Mark your answers on the quiz itself. We will not grade answers written on scratch paper.

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All the work on this exam is my own. (please sign)
1. (5 points) Print If

Implement the print_if function, which takes a non-negative integer n and a predicate function pred. print_if prints out all non-negative integers from 0 to n-1 (inclusive) for which pred returns True, in increasing order, and returns the number of integers that it printed.

You may only use the lines provided. You do not need to fill all the lines.

Two examples of predicate functions are the is_even and is_greater_than_three functions below. is_even returns True if the input is even and False otherwise. is_greater_than_three returns True if the input is greater than three and False otherwise.

```python
def is_even(x):
    return x % 2 == 0

def is_greater_than_three(x):
    return x > 3

def print_if(n, pred):
    """
    >>> # 0, 2, 4, 6 are the non-negative even integers less than 8.
    >>> even_count = print_if(8, is_even)
    0
    2
    4
    6
    >>> even_count
    4

    >>> # 4, 5 are greater than 3 and less than 6.
    >>> range_count = print_if(6, is_greater_than_three)
    4
    5
    >>> range_count
    2
    """
```

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1 A predicate function is a one-argument function that always returns either True or False.