CSE 160 Section 2 Problems

1. Fill in the necessary code to count the number of times the letter “l” appears in the list words.

   ```python
   words = ['hello', 'world', 'python', 'yellow']
   l_count = 0

   print(l_count)
   ````

   The output should be 5.

2. Write a function, `over_twenty(ages)` to count the number of people over 20 years old in the list `ages`.

   ```python
   ages = [20, 21, 20, 22, 19, 18, 14, 35]
   ```

3. Write a function `age_groups(ages)` that calculates and prints out the number of people 30 years old and above, the number of people 20-29 years old, and the number of people under 20 years old in the list `ages`.

   ```python
   ages = [20, 21, 20, 22, 19, 18, 14, 35]
   ```

4. Write a function `odd(num)` that returns `True` if a number is odd and `False` if a number is even. Your function should take in an integer `num` and return a boolean.
5. Write a function that calculates and returns the average of `ages`. You are not allowed to use Python's built-in `sum()` function. Your function should take in the list `ages` as a parameter and return the average.

```python
ages = [20, 21, 20, 22, 19, 18, 14, 35]
```

6. Given a function `get_height` that computes the height of the student passed in, write a new function `max_height` that finds the maximum height of all the people in the class. Your function should take in a list of student names and return the maximum height. You can assume height is in inches and that the list of all students in the class is `class_lst`. `get_height('nicholas')` will return 75.

What is the type of `max_height(students)`?

Suppose the code was modified to print `max_height` instead of return `max_height`, what would be the type of `max_height(students)`?