

### CSE 4256: Homework 9 - Due Monday, July 5

1. The "look and say" sequence is defined as follows: beginning with the term 1, each subsequent term visually describes the digits appearing in the previous term. The first few terms are shown below:

1  
11  
21  
1211  
111221

As an example, the fourth term is 1211, since the third term consists of one 2 and one 1.

Write a function named `look and say(n)` that takes a positive integer as an argument and returns the  $n$ th term in the sequence.

2. Write a function named `shortest path(s)` that takes an absolute pathname as an argument and returns the shortest standardized path. The pathname may have `.` or `..` as part of it. A `."` indicates the current directory; a `".."` means move up one directory.

For example, given `"/usr/bin/./bin/./scripts/./"`, return `"/usr/bin/"`.

Hint: Consider using the `split()` method.