

# Question with Test Case

Provide several examples that call your function and demonstrate that it works.

Provide the average runtime and space complexity (memory usage), and worst-case runtime and space complexity for your solution, and a short explanation as to why.

State any assumptions you make for your solution.

Question:

Given an access log for a feature, output the customer ids of repeat customers who have visited on 3 or

more consecutive days. Each line of the access log is tab delimited with two fields: the timestamp of

when the customer visited, and the customer id (a 10-byte string). The feature writes an entry to the log

file as it gets the hits. Below is an example log file.

```
$log = '08-Jun-2012 1:00 AM 4ABCDEFGH 09-Jun-2012 1:00 AM 1ABCDEFGH09-Jun-2012 9:23 AM
3ABCDEFGH
10-Jun-2012 1:00 AM 2ABCDEFGH
10-Jun-2012 2:03 AM 2ABCDEFGH
10-Jun-2012 1:00 AM 1ABCDEFGH
10-Jun-2012 7:23 AM 3ABCDEFGH
10-Jun-2012 9:23 AM 3ABCDEFGH
11-Jun-2012 1:00 AM 1ABCDEFGH
11-Jun-2012 2:12 AM 2ABCDEFGH
11-Jun-2012 8:23 AM 3ABCDEFGH12-Jun-2012 10:21 PM 1ABCDEFGH';
```

In this example, the 3-consecutive-day repeat customers are "1ABCDEFGH" and "3ABCDEFGH". The

result that your program generates will be these two customer ids. \*/

Test Cases:

```
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
09-Jun-2012 2:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
09-Jun-2012 1:00 AM 1ABCDEFGHI
09-Jun-2012 2:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
11-Jun-2012 1:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
09-Jun-2012 2:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
12-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 1:00 AM 1ABCDEFGHI
09-Jun-2012 2:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
12-Jun-2012 1:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
09-Jun-2012 2:00 AM 1ABCDEFGHI
11-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
12-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 5:00 AM 1ABCDEFGHI
08-Jun-2012 2:00 AM 1ABCDEFGHI
10-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 8:23 AM 3ABCDEFGHI';
$log = '08-Jun-2012 1:00 AM 4ABCDEFGHI
12-Jun-2012 1:00 AM 1ABCDEFGHI
11-Jun-2012 5:00 AM 1ABCDEFGHI
```

09-Jun-2012 1:00 AM 1ABCDEFGHI

11-Jun-2012 1:00 AM 1ABCDEFGHI

13-Jun-2012 1:00 AM 1ABCDEFGHI11-Jun-2012 8:23 AM 3ABCDEFGHI' ;

Result for above test cases are: All these should yield one result - 1ABCDEFGHI

---

### Revision #3

Created 1 year ago by [Anand Singh](#)

Updated 19 seconds ago by [Anand Singh](#)