Skills to look for: Understanding what an API call is, experience with server side javascript (NODE JS), experience with front-end javascript (react), etc.

**Technical Interview Questions**

1. Given a value *x* (could be a string, public key, etc.), the hash of *x* is a value that is easy to compute. But if you know the value hash(*x*), it is not easy to figure out what x was. Why do you think hashes are important in security? Suggest a way you can use hashes to perform a security check to verify someone’s identity.
2. Suppose you have an array that has more than two elements. In any object oriented language, or in pseudocode, assume you are given an index. Your goal is to write a function that shifts the values to the left after that index, and makes the last value zero.

For example, if your array is,

[1,2,1,4,3,5,3], and the index is 3, the output should be:

[1,2,4,3,5,3,0]

1. A Fibonacci sequence is a sequence that has the property that the next term is the sum of the previous two terms. The first and second terms are both one. For an example, the third term is the sum of the first two terms, so it is 1 + 1 = 2. The fourth term is the sum of the third and second terms, so it is 2 + 1 = 3. The fifth term is the sum of the fourth and third terms, so it is 3 + 2 = 5.

Write a **recursive** function that calculates the n-th term of a Fibonacci sequence.

1. Suppose you have an array and want to find the first index with a given value (val). Write a function to do so.

**Solutions:**

1. Register the hash of the user’s publickey/identity. When they provide you their publickey, see if it’s hash corresponds to your registered hash. That way, if they access their registered hash, they cannot pretend to be you.
2. for(var i = 1; i <= array.length ; i++)

{

if(i == index)

{

}

}

Note: Answer depends on if they consider index = 0 to be the first index or index = 1.

1. function fib(n)

{

if(n == 1 || n == 2)

{

return 1;

}

else return fib(n-1) + fib(n-2);

}

1. NOTE: The below assumes you start at index 0. Answer depends on if they interpret the code starting at index 1.

var index = -1;

bool found = false;

for(var i = 0; i < array.length; i++)

{

if(array[i] == val && found == false)

{

found = true;

index = i;

}

}