# INTERVIEW DEMO

BY ACSU ACADEMIC TEAM (FEAT. SOME SENIORS AND DANIEL)

### **MOCK INTERVIEWS**

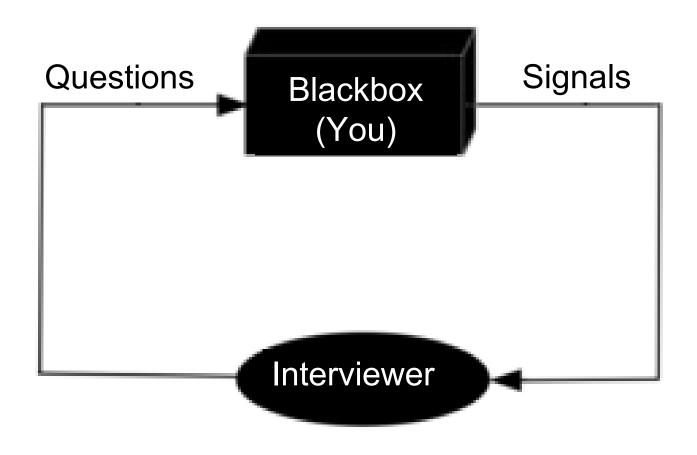


### **INTERVIEWING != OBJECTIVE**

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TODAY: CHANGING THE WAY WE LOOK AT INTERVIEWING.

### WHAT IS AN INTERVIEW?



### THE SITUATION

It is 2014. A fresh-faced Hong Jeon walks into an interview room...

### THE QUESTION

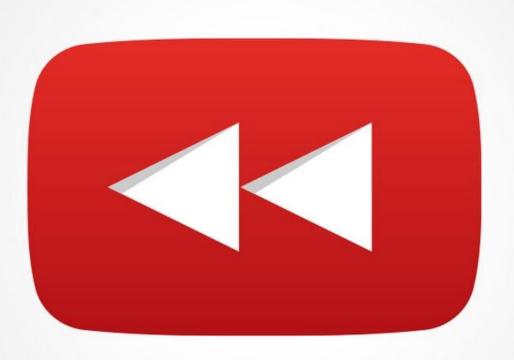
Given a list of numbers of size n, where the elements range from 1 to n, find the duplicate number.

public int findDuplicate(int[] lst) {

### CASE 1: SILENT INTERVIEWEE

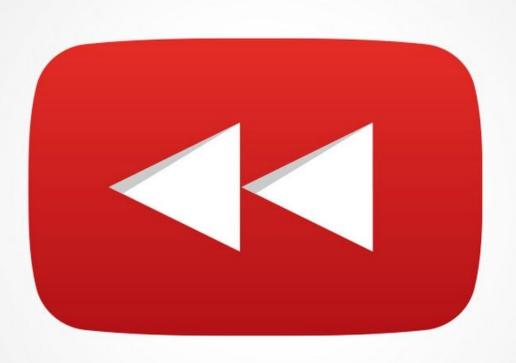
```
public int findDuplicate(int[] lst) {
   int arraySum = 0;
   int seriesSum = 0;
   for (int i = 0; i < lst.length; i++) {
      arraySum += lst[i];
   }</pre>
```

### CASE 2: STRAIGHT TO CODE



```
public int findDuplicate(int[] lst) {
    int arraySum = 0;
    int seriesSum = 0;
    for (int i = 0; i < lst.length; i++) {
        arraySum += lst[i];
    for (int i = 1; i <= lst.length) {
        seriesSum += i;
    return arraySum - seriesSum;
```

### CASE 3: NO CLARIFYING QUESTIONS



```
public int findDuplicate(int[] lst) {
    HashSet<Integer> jihun = new HashSet<Integer>();
        for(int i = 0; i < lst.length ; i++)
    if (jihun.contains(lst[i])){
         return lst[i]; }
    else{
         jihun.add(lst[i]);
```

### **A NOTE**

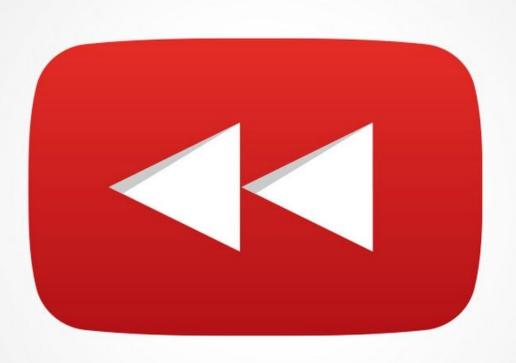
## False Positives do much more harm than False Negatives.

```
public int findDuplicate(int[] lst) {
    HashSet<Integer> visited = new HashSet<Integer>();
    for (int i = 0; i < lst.length; i++) {
        if (visited.contains(lst[i])) {
            return lst[i];
        } else {
            visited.add(lst[i]);
```

### CASE 4: FOLLOW-UP QUESTIONS

```
public int findDuplicate(int[] lst) {
    for (int i = 0; i < lst.length; i++) {
          for (int j = 0; j < lst.length; j++) {
               if (i != j) {
                    if (lst[i] == lst[j]) {
                         return lst[i];
```

### CASE 5: THE ARGUER



#### public int findDuplicate(int[] lst) {

```
int pivot = (input.length+1)/2;
int It = 0, gt = 0, eq = 0;
int lbound = 0;
int rbound = input.length;
while (lbound != rbound) {
        for (int i = 0; i < input.length; i++) {
                 if (input[i] < pivot) \{ lt +=1; \}
                 if (input[i] == pivot) { eq +=1; }
                 if (input[i] > pivot) { gt +=1; }
        if (eq >1) { return pivot;
        } else if (gt > input.length - pivot -1) { lbound = pivot; pivot = (pivot + rbound + 1)/2;
        } else if (lt > pivot - 1) { rbound = pivot; pivot = pivot/2;
        It = 0; gt = 0; eq = 0;
}
return -1;
```

#### RECAP

- 1. Interview is not an objective process
- 2. Performance is not a binary grade
- 3. Knowing what the interviewer is looking for will set you apart