

Please use this Google doc to code during your interview. To free your hands for coding, we recommend that you use a headset or a phone with speaker option.

Best,
Google Staffing

Example input:

```
input = []
input.append(("animal", "mammal"))
input.append(("animal", "bird"))
input.append(("lifeform", "animal"))
input.append(("cat", "lion"))
input.append(("mammal", "cat"))
input.append(("animal", "fish"))
```

```
printTree(input)
```

Expected output:

```
line 1: lifeform
line 2:  animal
line 3:    mammal
line 4:      cat
line 5:        lion
line 6:    bird
line 7:    fish
```

```
# build the tree, key=parent, value=list of children
import collections
```

```
def print_node(tree, node, level=0):
    print '\t'*level,
    print node
    for child in tree[node]:
        print_node(tree, child, level + 1)
```

```
tree = collections.defaultdict(list)
children = set()
for parent, child in input:
    tree[parent].append(child)
    children.add(child)
```

```
for node in tree:
    if node not in children:
        print_node(tree, node)
```

I'm here

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

[1,2,3,4,5]

```
def remove_duplicates(li):  
    unseen_list = set(li)  
    for item in li:  
        if item in unseen_list:  
            seen_list.remove(item)  
            yield item
```

```
def remove_duplicates2()  
    seen_list = set(li)  
    result = list(seen_list)  
    return result
```

1

sorted(li,