



# Trees Problem Solving

# Problem 1: Link

## Problem 2: Link

## Problem 3: Link

```
int cat = // some value given to me

for(int i = log2(n); i >= 0; i--){ // log(n)
    int parent = binary_lifting(i, cat); // 0(1)
    if(parent is unoccupied)
        cat = parent
}
// n cats -> nlogn

cout << cat << nline;
```

## Problem 4: Link