

```
#include <stdio.h>

// Find the generation of the person at this index
int print_gen(int *tree, int idx){
    int g = 1; // generation
    while(tree[idx] != -1){ // Till I reach the head
        idx = tree[idx];
        g++;
    }
    return g;
}

int main()
{
    int n, a, b;
    scanf("%d", &n);

    int tree[n+1];
    for(int i = 0; i <= n; i++)
        tree[i] = -1; // -1 means that person does not have a parent

    // Assign everyone their parent
    for(int i = 0; i < n-1; i++){
        scanf("%d %d", &a, &b);
        tree[b] = a;
    }

    int q;
    scanf("%d", &q);

    for(int i = 0; i < q; i++){
        scanf("%d", &a);
        printf("%d", print_gen(tree, a));
        if(i < q-1)
            printf("\n");
    }

    return 0;
}
```