

```
class Solution {
public:
    int findTheWinner(int n, int k) {
        int *a = (int*)malloc(n * sizeof(int));
        for (int i = 0; i < n; ++i) {
            a[i] = i + 1;
        }
        int size = n;
        int start = 0;
        while (size > 1) {
            start = (start + (k - 1)) % size;
            for (int j = start; j < size - 1; ++j) {
                a[j] = a[j + 1];
            }
            --size;
        }
        int winner = a[0];
        free(a);
        return winner;
    }
};
```

▪ Case 1

▪ Case 2

Input

$n =$

5

$k =$

2

Output

3

Expected

3

• Case 1

• Case 2

Input

n =

6

k =

5

Output

1

Expected

1