UVa Online Judge

# 12004 Bubble Sort

Check the following code which counts the number of swaps of bubble sort.

```
int findSwaps( int n, int a[] )
{
    int count = 0, i, j, temp, b[100000];

    for( i = 0; i < n; i++ ) {
        b[i] = a[i];
    }
    for( i = 0; i < n; i++ ) {
        for( j = 0; j < n - 1; j++ ) {
            if( b[j] > b[j+1] ) {
                temp = b[j];
                b[j] = b[j+1];
                b[j+1] = temp;

                count++;
            }
        }
    }
    return count;
}
```

You have to find the average value of '***count***' in the given code if we run **findSwaps()** infinitely many times using constant '$n$' and each time some random integers (from 1 to $n$) are given in array $a[]$. You can assume that the input integers in array $a[]$ are distinct.

## Input

Input starts with an integer $T$ ($\leq 1000$), denoting the number of test cases. Each test case contains an integer $n$ ($1 \leq n \leq 10^5$) in a single line.

## Output

For each case, print the case number and the desired result. If the result is an integer, print it. Otherwise print it in '$p/q$' form, where $p$ and $q$ are relative prime.

## Sample Input

```
2
1
2
```

## Sample Output

```
Case 1: 0
Case 2: 1/2
```