B Spanning Subtrees

Input: Standard Input
Output: Standard Output

Let $\mathbf{K_n}$ denote the complete undirected graph with n vertices where n is an even number. In other words, $\mathbf{K_n}$ is a graph with n vertices where every two vertices are connected. Your task is to find the maximum number of spanning trees of $\mathbf{K_n}$ that can be formed in such a way that no two of these spanning trees have a common edge.

Input

Each test case will have an even integer **n (2 ≤ n ≤ 400)**, the number of vertices. The last test case will be followed by a single 0 denoting end of input.

Output

For each test case, print a line in the format, "Case X: Y", where X is the case number & Y is the maximum possible number of spanning trees.

Sample Input	Output for Sample Input
4 0	Case 1: 2

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