

BUBT INTRA-UNIVERSITY PROGRAMMING CONTEST SPRING 2017 (DIVISION 1)

Finished

THE CONTEST HAS ENDED.

F. Find the Summation

Score: 1
CPU: 2s
Memory: 512MB

Professor Edward is very angry with his students, because they have not completed his home task. As a result, he boycotts the classroom. Students realize their wrong. They go to the professor's room and acknowledge their fault. Professor Edward give the students one condition: If they can find the summation of a series, then he will return to the classroom. The series is:



You will be given N, find the summation of this series as soon as possible.

INPUT

The first line of input will contain an integer T($1 \leq T \leq 10$) that will determine the number of test cases. Each case starts with one integer N($1 \leq N \leq 100$).

OUTPUT

For each test case, output the line "**Case #x: S**", where x is the number of the test case, S is the summation of the series.

Sample

Input	Output
3	Case #1: 8
1	Case #2: 360
5	Case #3: 9248
16	

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