Write C program that reads an integer value N from stdin, prints to stdout the number Q ways to assign values 1, 2, …, 9 to characters I, C, T, H, U, S, K (characters are assigned with different values) such that:

ICT - K62 + HUST = N

**Input**

* Unique line contains an integer N (1 <= N <= 105)

**Output**

* Write the value Q

**Example**

**Input**

2000

**Output**

28