

# LUCKY TICKETS

## CHALLENGE DESCRIPTION:

We can receive a lucky ticket in a public transport. How to reveal whether the ticket is lucky or not? We call a ticket lucky if the sum of its digits in the first half equals to the sum of digits in the second half. For example, ticket 328940 is a lucky one because  $3+2+8=9+4+0$ . Write a program that will count the maximum number of lucky tickets depending on the length of the ticket number. In other words, how many lucky combinations can be if a ticket number comprises 4, 6, 8, ... digits ?

## INPUT SAMPLE:

The first argument is a path to a file. Each line includes a test case with an even number that indicates the length of the ticket number.

For example:

```
4
6
8
```

## OUTPUT SAMPLE:

Count and print the maximum possible number of lucky tickets depending on the length of the ticket number.

For example:

```
670
55252
4816030
```

## CONSTRAINTS:

- 1. The length of a ticket number can be from 2 to 100 digits.
- 2. Tickets 000000 and 999999 should be also counted.
- 3. All the input numbers are even.
- 4. The number of test cases is 40.