

## D // Classic BDay

After Zhehai returns home from a horrible, he realizes that it is his mother's birthday. Zhehai forgot to get a present for his mother and is distressed. Zhehai's father, Mr. Zhang, also forgot to get a present. Zhehai sees an opening. As Zhehai is a mathematician, he decides to use Math to buy him some time. He bets his father that if out of the N people attending the party at least two have the same birthday, then his father will buy Zhehai time to get a gift. However, if no two people have the same birthday, then Zhehai has to buy time for his father.

### Input Specification:

The input consists of one positive integer N, representing the number of people at the party.

### Output Specification:

Output the probability that at least two people have the same birthday rounded to exactly 2 decimal places when written as a percent.

### Sample Input:

```
23
```

### Sample Output:

```
50.73
```