Birthday Paradox

**Time Limit:** 1.0s  **Memory Limit:** 256M

The Birthday Paradox concerns the probability that, in a set of n randomly chosen people, some pair of them will have the same birthday. For groups of at least 23 people, the probability is more than 50% which may sound odd at first sight. METU CClub is curious about a more general form of the birthday paradox. If all of the final contest participants are randomly chosen, what is the probability that some $M$ of them have the same birthday? Your task is to find the minimal number of participants such that this probability is at least $P$ percent.

In this problem we ignore a leap year, i.e. there are 365 days in a year. For each particular participant, the probability of being born on a particular day is $1/365$.

**Input**

Two integers $M$ and $P$ separated with a single space.

**Output**

The minimal number of participants.

**Constraints**

- $1 \leq M \leq 10$
- $0 \leq P \leq 100$

**Examples**

**Input (stdin)**

```
2 50
4 100
```

**Output(stdout)**

```
23
1096
```

**Notes**

In the second sample according to the Dirichlet's principle among $1096 (3 \times 365 + 1)$ participants at least 4 have the same birthday.