

4659 Alien

It is 2050 and human live with alien. There are two kind of alien: good alien and evil alien. Good alien were our friend because they help us to develop good technology for our earth. Evil alien were very very bad, they develop heavy and dangerous weapons that can destroy earth. Alien were very hard to kill because of their ultra regeneration skill. Luckily, we have developed a kind of bomb that can kill alien in an instant. This weapon is very expensive so we must use it wisely.

Given a map of 10×10 , each element in the map will be:

- '.' represents empty region.
- 'g' represents good alien.
- 'e' represents evil alien.

Calculate how many evil alien that can be killed without killing any good alien, and how many bombs we need to do that. A bomb has a 3×3 area of effect, so all of the 8 adjacent neighbors will also be destroyed. You can put bomb anywhere in the map, even if there is an alien in that cell.

For example,

```
e..
.Xe
..e
```

Bombing at X will kill three evil aliens.

Our spy has reported that the number of alien groups from each side is less than 16.

Input

First line in the input will be T ($1 \leq T \leq 100$) number of cases. Each case will have a map of 10×10 represent the city. Between each city will be separated by a blank line.

Output

For each case, output two numbers: a and b , where a is the maximum number of evil aliens that you can kill and b is the minimum number of bombs you need to do that.

Sample Input

```
2
.....
.....
...eee...
...eee...
...eee...
.....
.....
...ee.....
```

...ee.....
.....

.....
.....
...ggg.....
...geg.....
...ggg.....
.....
.....
...eg.....
...ge.....
.....

Sample Output

13 2
2 2