Java → Object-oriented programming → Classes and objects → <u>Static members</u>

Static members → **Too many cats**

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Let's count the cats! Implement a class named Cat and a static method getNumberOfCats.

These are some features of the class:

- The class Cat has two instance fields: string name and int age, and one static int field counter. The static counter field allows you to know how many cats have been already created.
- The class should have a constructor for initializing the instance fields. During the initialization of a new cat, the value of the static field counter should be incremented. If the counter > 5, the message "You have too many cats" must be printed out in the System.out.

Your static method getNumberOfCats should return the current number of created cats and print no messages.

Take a look at the example:

Let's assume seven instances of the class Cat have already been created. Then the correctly implemented method Cat.getNumberOfCats() should return 7. The message "You have too many cats" has to appear twice.

Use the provided template and do not make the class private.

Report a typo

✓ Write a program

Code Editor IDE

```
1 class Cat {
2
        // write static and instance variables
3
4
        String name;
5
        int age;
6
        public static int counter = 0;
        public Cat(String name, int age) {
8
9
            // implement the constructor
10
            // do not forget to check the number of cats
11
            if (counter >= 5) {
12
                System.out.println("You have too many cats");
13
14
            this.name = name;
15
            this.age = age;
16
            ++counter;
17
18
19
20
        public static int getNumberOfCats() {
            // implement the static method
21
22
            return counter;
23
24
25
```

✓ Correct.

That's an awesome solution! What do you think about showing it off? Post it to Solutions so other learners can enjoy it too.

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