

What is overloading – specifically method overloading?

Declare a variable that refers to an array that contains Actor objects.

Create the array to hold a maximum of 20 actors and assign it to the variable you created in the previous part.

Put a new Actor object into the array at index 10.

Write the code that would retrieve object at index 4 of the array.

What is the first index for an array?

What is the last index for an array?

Write a while loop that continues to execute while the variable x is true, but stops when x is false. Every time the body of the loop is executed, you should create a new Ball object.

Below is a class for an Actor subclass named `Dancer`. You should program the `Dancer` class to keep track of how many steps it has danced. When it has danced 45 steps, the `Dancer` object should reset its count back to zero and set the `Dancer` object's rotation to be 45 more to the right than it was previously.

```
public class Dancer extends Actor {
```

```
    public void act() {
```

```
    }
```

```
}
```

There may also be some similar questions to the code-writing questions from Exam 3 (using if/else and loops).