

Note: You may use your notes or my notes from my website. No other resources may be used during this quiz.

Question 1. (2 points) Suppose you have a class representing Cat objects. Each cat has the following fields (instance variables):

- String name
- String sex
- boolean isUpForAdoption
- int age

Suppose you have a list of Cats, populated as follows. (Also assume the Cat class has getter methods for its fields.)

```
// Cat constructor asks for name, sex, isUpForAdoption, age
Cat cat1 = new Cat("Snowy", "female", false, 13);
Cat cat2 = new Cat("Kuma", "male", true, 4);
Cat cat3 = new Cat("Ophelia", "female", false, 15);
Cat cat4 = new Cat("Zuko", "male", true, 6);
Cat cat5 = new Cat("Seymour", "female", true, 8);

List<Cat> cats = List.of(cat1, cat2, cat3, cat4, cat5);
```

What would be the value of the following expression?

```
cats.stream()
    .filter(c -> c.sex.equals("female"))
    .map(Cat::isUpForAdoption)
    .reduce(true, (acc, curr) -> acc && curr)
```

false

Question 2. (2 points) Use streams to find the youngest Cat in the list.

cats.stream()

```
.reduce((acc, curr) -> acc.getAge() < curr.getAge() ? acc : curr)
.orElse(null);
```