• What will be printed?

Meow. I am a cat. My name is Kurre

and I am 6 years old.

Woof. I am a dog. My name is Vilma

and I am 3 years old.

• Explain how it is that the instance variable age of Animal can be used in Cat and Dog when it is declared in Animal.

Animal is superclass to class Cat and Dog. Cat and Dog will get the variables through inheritance.

• What actually consists an instance of?

Instance is a specific realization of object in OOP.

• And what consists a class of?

Class is a container which method, instance variable, object are created to form of set of properties.

• What is the difference between a class and an instance?

Class variables are declared with keyword static and Instance variables are declared without static keyword.

• Change the declaration of the instance variable age of Animal to a class variable using static, in this way:

public static int age;

• What is the result of the output now? Why?

Meow. I am a cat. My name is Kurre

and I am 3 years old.

Woof. I am a dog. My name is Vilma

and I am 3 years old.

• It may happen that you get warnings from the compiler that you should access the variable age via Animal.age, but it should be possible to run the program anyway. Otherwise, change the references to age into Animal.age.

• Where is the value of an instance variable stored?

Stored under the class it was defined in.

• Where is the value of a class variable stored?

Property of the class’ objects.

• What refers the variable this to?

The “this” keyword refers to the current object in a method or constructor. It can be used when have a variable with same variable name.