Other questions (JAVA):

- 1) Explain the concept of abstract in Java and describe abstract methods and classes.
- 2) What is the constructor in a class?
- 3) Explain the method wait(), notify(), notifyAll() used in multithreading
- 4) Explain the concept of Polymorphism with also some examples.
- 5) Write an example code where you instantiate a JFrame, make it visible and set the size.
- 6) For the class in exercise 5 sort the list in alphabetic order according to the name.
- 7) Define a UML class diagram of the problem presented below:

Each customer has a name and address and can make an order and the corresponding payment. The payment can be of three kinds: cash, check or credit. Each order contains the order details, such as the date that has been done and the status and also its associated items that have been purchased.

- 8) How synchronized work in java? Provide an example to show why it can be used and how.
- 9) Wait and notify: Explain in java why they are used and provide an example.
- 10) Write the java code for the following class represented in UML notation:

| -, |
|---|
| Person |
| - name: String - surname:String - age: int |
| + Person(String: name) |
| + Person(String:name, String:surname) + setSurname(s: String): void + setAge(int n): void |
| + getSurname(): String + getAge(): int |

- 11) explain the inheritance principle and bring some examples.
- 12) Describe the event handling model and how you will implement in Java.
- 13) Describe how to start the Thread in Java. Provide also an example in Java code.

Other questions (C++):

- 1) Explain the concept of "virtual" in c++ and provide some examples.
- 2) What is the constructor in a class?

- 3) Explain how to create a thread in C++
- 4) Explain the concept of Polymorphism with also some examples.
- 5) For the class in exercise 5 sort the list in alphabetic order according to the name.
- 6) Define a UML class diagram of the problem presented below:

Each customer has a name and address and can make an order and the corresponding payment. The payment can be of three kinds: cash, check or credit. Each order contains the order details, such as the date that has been done and the status and also its associated items that have been purchased.

7) Write the java code for the following class represented in UML notation:

| Person | |
|---|--|
| - name: String - surname:String - age: int | |
| + Person(String: name) + Person(String:name, String:surname) + setSurname(s: String): void + setAge(int n): void + getSurname(): String + getAge(): int | |

8) Explain the inheritance principle and bring some examples.