

## Theory Questions

- a) Describe briefly the fundamental characteristics of creational design patterns.
- b) What is the difference between an Abstract and Concrete class?
- c) What is the intent of the builder design pattern?

## Practical Work:

A ) Get the person code implementation with the builder design pattern in resources up and running and comment it to show you understand it.

B) Using the code provided in resources this week (ComputerBuilderDirector), write a Java code implementation for a Computer class where the required parameters and optional parameters are:

```
//required parameters
    private String RAM;
    private String HDD;
    private String CPU;

//optional parameters
    private boolean isGraphicsCardEnabled;
    private boolean isBluetoothEnabled;
```

Using a class called ComputerClient, you should test the creation of a computer using the **builder pattern** and also test the creation of a computer using the **director class** (ComputerBuilderDirector).