

1. We have discussed Open Closed Principle using computer parts example in the lecture. However, we have only analyzed code excerpts, not the whole program. In this lab you will be asked to give the full implementation demonstrating the OCP. You are going to provide the following classes:
PricePolicy
Part
Motherboard, Memory, HardDisk
2. You are also going to write a function called **totalPrice**
3. Write a main to test your program
 - a. Create an array of parts which makes up a computer
 - b. Calculate the price of the computer
4. Demonstrate the Open-Closed Principle by
 - a. extending the software using a new part called **OpticalDisk**,
 - b. creating a new price policy and update **HardDisk** and **Memory** objects using new price policies.
5. In your program list classes/modules/functions that does not change even though the parts get different prices.

Hint: Copy and paste the source code lines from the week1's slide. This saves some amount of typing.