



**Universidade de Aveiro**  
**Mestrado em Engenharia Informática**  
**Mestrado em Robótica e Sistemas Inteligentes**  
**Simulação e Otimização**

**Lesson 2: Simulation of Inventory System**

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Consider the inventory system that is described in the slides of the class that took place on February 22. Taking as starting point the python program you developed for Lesson 1, develop a python program that simulated the inventory system and that allows the evaluation of the following nine  $(s, S)$  inventory policies:

$s$	20	20	20	20	40	40	40	60	60
$S$	40	60	80	100	60	80	100	80	100

The program should provide estimates on the total cost, ordering cost, handling cost and shortage cost for each of the policies.

## Bibliography

- [1] “Simulation Modeling and Analysis”, Averyl M. Law, 5th Edition, McGraw-Hill