

## THE SUSHI EXPERIENCE

A Japanese businessman has opened a Sushi restaurant in Valencia called "*The Sushi Experience*" that offers a buffet service to their customers. He has thought about organizing the service through an **automatic conveyor belt** <sup>(1)</sup> that will serve dishes to the customers



<sup>(1)</sup> **Automatic conveyor belt**

Customers will not pay for a fixed price, but for the number of dishes that have consumed. A customer usually needs a time between 5 and 10 seconds to eat a dish.

The kitchen prepares four different types of dishes: "makisushi", "futomaki", "hosomaki" and "kappamaki". Each dish has a different price. When a dish is prepared it is placed on the conveyor belt which will bring food to customers. The time needed to prepare a dish is a random number between 1 and 2,5 seconds.

It is requested to write the code that simulates the behavior of the operation of the buffet.

## **Restrictions**

- The simulation will be carried out with 4 customers, who will choose 4 dishes as maximum.
- At the end of the simulation, the program should show
  - The account of each client based on the dishes consumed.
  - The profits generated for the owner.

## **Implementation suggestions**

- Possible class scheme:
  - **Dish:** consists of the name of the dish ("makisushi", "futomaki", "hosomaki", "kappamaki") and the associated price (instantiating a dish supposes randomly choosing between any of these 4 types).
  - **Kitchen:** serves dishes to the conveyor belt.
  - **Conveyor Belt:** makes available to customers up to 16 plates of the 4 types indicated.
  - **Customer:** consumes dishes and receives the bill at the end of the meal.

## **Part 2**

Modify the code so that in cases where a client consumes 2 times the same type of sushi he will be charged half the value of that type.