# Technical Test – Java Developer

## Programming questions (Java)

1. Library Management System - Design classes such as Book, Library and Member. Implement the methods for adding books to the library, borrowing books, returning books and displaying available books.
2. School Management System - Design classes like Student, Teacher and Course. Implement the methods for enrolling the students in the course, assigning the students to courses and generating student reports.

## Database questions (SQL query)

1. Get customer and product name purchased ordered by first name
2. Write a query to find customer who has no purchases in the order table
3. Find customer name who purchased more than 1 product

### Customer Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| customer\_id | first\_name | last\_name | amount | order\_date | gender |
| 1000 | Rick | B | 2000 | 2022-09-18 | M |
| 1001 | John | T | 2550 | 2022-06-06 | M |
| 1002 | Rose | P | 4000 | 2022-03-16 | F |

### Order Table

|  |  |  |
| --- | --- | --- |
| order\_id | customer\_id | total |
| 1 | 1001 | 500 |
| 2 | 1003 | 429 |
| 3 | 1004 | 100 |

### Product Table

|  |  |  |  |
| --- | --- | --- | --- |
| product\_id | customer\_id | product\_name | order id |
| 101 | 1002 | Book | 2 |
| 102 | 1001 | Pen | 1 |
| 103 | 1001 | Mouse | 1 |
| 104 | 1004 | Keyboard | 3 |