Write a program which can be used to calculate the take home pay for employees based on their location.

The application should be a console app which prompts the user for the hourly rate and hours worked for the employee.

"Please enter the hours worked: "

"Please enter the hourly rate: "

"Please enter the employee's location: "

The program will output their gross along with a list of deductions along with a net amount. For the purpose of this test you will assume that the currency in each country is dollars.

"Employee location: Ireland"

"Gross Amount: \$x "

"Less deductions"

"Income Tax: \$x"

"Universal Social Charge: \$x"

"Pension: \$x"
"Net Amount: \$x"

Requirements

As a payroll user I would like to see a gross amount calculation for an employee's salary.

 \cdot Given the employee is paid \$10 per hour, when the employee works 40 hours, the Gross amount is \$400

As a payroll user I would like to see deductions charged for employees located in Ireland

- \cdot Given the employee is located in Ireland, income tax at a rate of 25% is applied for the first \$600 and 40% thereafter
- \cdot Given the employee is located in Ireland, a Universal social charge of 7% is applied for the first \$500 and 8% thereafter
- Given the employee is located in Ireland, a compulsory pension contribution of 4% is applied

As a payroll user I would like to see deductions charged for employees located in Italy

- Given the employee is located in Italy, income tax at a flat rate of 25% is applied
- Given the employee is located in Italy, a social security contribution of 9.19% is applied

As a payroll user I would like to see deductions charged for employees located in Germany

- Given the employee is located in Germany, income tax at a rate of 25% is applied on the first \$400 and 32% thereafter
- Given the employee is located in Germany, a compulsory pension contribution of 2% is applied

The program should be written using test driven development.

We are looking for the solution to be well factored and to adhere to the SOLID principles.