Back-end Technical Test

Problem: Employee payslip for a flexible pay cycle

When a user input's the employee's details: first name, last name, annual salary (natural numbers) and super rate (0% - 12% inclusive), payment start date, the program should generate payslip information with name, pay period, gross income, income tax, net income and superannuation .

Example calculation for a calendar month is as follows:

- pay period = per calendar month
- gross-income = annual-salary / 12 months
- income-tax = based on the tax table provide below
- net-income = gross-income - income-tax
- super = gross-income x super-rate

Notes: All calculation results should be rounded to the whole dollar. If >= 50 cents round up to the next dollar increment, otherwise round down.

The following rates for 2017-18 apply from 1 July 2017 (The tax table is from ATO: https://www.ato.gov.au/Rates/Individual-income-tax-rates)

Taxable income	Tax on this income
0 – $18,200	Nil
$18,201 – $37,000	19c for each $1 over $18,200
$37,001 – $87,000	$3,572 plus 32.5c for each $1 over $37,000
$87,001 – $180,000	$19,822 plus 37c for each $1 over $87,000
$180,001 and over	$54,232 plus 45c for each $1 over $180,000

Deliverables

- Rationale around tech choices.
- List any assumptions that you have made in order to solve this problem.
- Link to the source on GitHub / Bitbucket.
- Provide instruction on how to run the application.
- Provide a test harness to validate your solution.

Example Solution only

Input

first-name, last-name, annual-salary, super-rate (%), payment-start-date

Andrew, Smith, 60050, 9%, 01 March – 31 March

Claire, Wong, 120000, 10% , 01 March – 31 March

Output

name, pay-period, gross-income, income-tax, net-income, super-amount

Andrew Smith,01 March – 31 March, 5004, 922, 4082, 450

Claire Wong, 01 March – 31 March, 10000, 2696, 7304, 1000