

## Welcome to the Smartly coding exercise!

This exercise helps us understand your approach to problem solving as well as your design, coding and testing skills – skills which we hold in high regard.

Please complete the problem using .NET and send us your solution. Feel free to take as much time as you need.

We will then review the solution and have another call for you to take us through it.

We look forward to receiving your solution - thank you and have fun!

### Problem: Employee monthly pay slip

When supplied employee details: first name, last name, annual salary (positive integer) and super rate (0% - 50% inclusive), pay period, the program should generate pay slip information with name, pay period, gross income, income tax, net income and super.

The calculation details will be the following:

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

Notes: All calculation results should be rounded to 2dp

The following rates apply:

Taxable income	Tax rate
Up to \$14,000	10.5%
Over \$14,000 and up to \$48,000	17.5%
Over \$48,000 and up to \$70,000	30%
Over \$70,000 and up to \$180,000	33%
Remaining income over \$180,000	39%

For example, the payment in March for an employee with an annual salary of \$60,050 and a super rate of 9% is:

- pay period = Month of March (01 March to 31 March)
- gross income =  $60,050 / 12 = 5,004.17$
- income tax =  $(14000 * 0.105 + 34000 * 0.175 + 12050 * 0.3) / 12 = 919.58$
- net income =  $5,004.17 - 919.58 = 4,084.59$
- super =  $5,004.17 * 9\% = 450.38$

Here is the csv input and output format we provide (but feel free to use any format you want):

Input (first name, last name, annual salary, super rate (%), pay period):

John,Smith,60050,9%,March  
Alex,Wong,120000,10%,March

Output (name, pay period, gross income, income tax, net income, super):

John Smith,01 March – 31 March,5004.17,919.58,4084.59,450.38  
Alex Wong,01 March – 31 March,10000.00,2543.33,7456.67,1000.00

As part of your solution:

- List any assumptions that you made in order to solve this problem.
- Provide instructions on how to run the application.

Good luck!