



Welcome to the MYOB coding exercise!

- Please complete the exercise using the language of your choice.
- Please make sure you write simple, idiomatic and well-tested code, well-structured and maintainable;
- Please ensure you have a well-written ReadMe which covers off why you built the solution the way you did, design decisions made, how to run your code/tests, assumptions & trade-offs made.
- Please send us your solution as an archive.
- Code exercise is designed to be completable in around **two hours**, although there is a time limit set to **1 week**.
- We will then review your solution and use as input for the next round of our interviewing process.
- We will assess your solution on: Solution design (Includes domain modelling, tax calculation approach, separation of concerns and coupling); Knowledge of technology and language; Testing (Includes readability, testing one thing, tests intent rather than mechanism, helps rather than hinders refactoring); Documentation.
- We value openness and continual learning so we will also provide you with feedback on your solution's better aspects and any areas that could be improved.
- We look forward to receiving your solution - thank you and have fun!

Problem: Employee monthly pay slip

Create a console application that given employee annual salary details outputs a monthly pay slip.

Attributes of the employee are:

- name
- annual salary

Attributes of the monthly pay slip are:

- name
- gross monthly income = $\text{annual salary} / 12 \text{ (months)}$
- monthly income tax = $(\text{annual tax rate as provided below}) / 12 \text{ (months)}$
- net monthly income = $\text{gross monthly income} - \text{income tax}$

The following annual tax rates apply:

Taxable income	Tax on this income
\$0 - \$20,000	\$0
\$20,001 - \$40,000	10c for each \$1 over \$20,000
\$40,001 - \$80,000	20c for each \$1 over \$40,000
\$80,001 - \$180,000	30c for each \$1 over \$80,000
\$180,001 and over	40c for each \$1 over \$180,000

For example, for an employee with an annual salary of \$60,000:

- gross monthly income
= $60,000 / 12$
= 5,000
- monthly income tax
= $((20,000 * 0) + ((40,000 - 20,000) * 0.1) + ((60,000 - 40,000) * 0.2)) / 12$
= $(0 + (20,000 * 0.1) + (20,000 * 0.2)) / 12$
= $(0 + 2,000 + 4,000) / 12$
= 500
- net monthly income
= $5,000 - 500$
= 4,500

Here is example console input:

```
GenerateMonthlyPayslip "Mary Song" 60000
```

and example output:

```
Monthly Payslip for: "Mary Song"
Gross Monthly Income: $5000
Monthly Income Tax: $500
Net Monthly Income: $4500
```

Good luck!