

Summative Assessment 2: Simple Payroll Computation Program Using Functions

Computer Programming

PROGRAM REQUIREMENTS:

You are tasked to create a new version of the payroll program you created in SA1. Name your program as **sa2_<lastname>_section>.cpp**. This time, you need to use functions and loop structures to improve the current payroll system that you have. Check the user requirements given and make sure that you will accomplish them all.

1. An employee works for a regular of 40 hours a week. Beyond that is considered an over time. For example, an employee worked for 48 hours in that week, it means he has an 8-hour over time and he is entitled to an overtime pay.
2. The overtime rate is 25% of the rate per hour of an employee and the overtime pay is computed as number of overtime hours multiplied by the overtime rate per hour.
3. The gross pay of an employee is its salary without deductions. It is calculated by multiplying the rate per hour and the regular number of hours worked added with overtime pay. Use a function for this and name it as **computeGP()**
4. Each employee is entitled to several benefits such as SSS, Pagibig and Philhealth. These benefits are deducted to the gross pay of an employee. To compute for these benefits, use the following functions in your code. Each function should receive inputs and return the correct computation to the calling function.
 - a. **computeSSS()**
 - b. **computeLove()**
 - c. **computePH()**
5. The SSS contribution is computed as follows:

Gross pay	SSS
<=5, 000	Php105.00
5, 001 – 10, 000	5% of the gross pay
10, 001-15, 000	8% of the gross pay + P75
>15, 000	12% of the gross pay + P110

6. Pagibig contribution is fixed to P100.00 and Philhealth is contribution is based on the following:

Gross pay	Philhealth
<=5, 000	Php55.00
5, 001 – 10, 000	3.5% of the gross pay
>10,000	8% of the gross pay + P25.50

7. Also, tax is deducted to employees' gross pay. To compute the tax, use the function **computeTAX()** that will return the correct computation to the calling function. Use the tax table below:

Gross Pay	Tax
>50000	32% of GP
45000-49999	23% of GP
35000-44999	18% of GP
<35000	8% of GP

8. After computing all the deductions, the net salary of an employee is calculated. It is computed as gross pay – total deductions. Use another function for this one. Name it **computeNET()**.
9. The program should also accept the following employee information: LastName, FirstName, MiddleName, Department, Position, rate per hour and number of hours worked.
10. If the employee's position is a manager, there is an additional Php5, 000.00 to his net salary.
11. The program should be able to display the summary or pay slip of an employee. See sample pay slip below.
12. Create a video of you discussing your code. You need to explain in the video the overall structure of your program and how you used functions and loops to accomplish the program.
- 13. The video should be uploaded to YT.**
14. Your work will be graded according to the following criteria:
- | | | |
|---|---|-----------|
| a. Correctness and Completeness of the Output | - | 10 points |
| b. Use of Functions and Loops | - | 8 points |
| c. Clarity of Discussion in the Video | - | 7 points |



SAMPLE PAY SLIP

Garcia, Donna M.

Department: Computer Science
Position: Faculty
Rate per Hour: Php378.25
of Hours Worked: 40

Gross Pay: Php

Deductions:

SSS – Php

Pagibig – Php

Philhealth – Php

Tax – Php

Total Deductions: Php

Net Salary: Php

Do you want to try again [Y|N]? y