

CS 1400 – Summer 2018

Assignment #5

Introduction

You will complete two programs to give you experience with:

- Software Development Process
- Functions
- Strings
- Objects
- Formatting

Task 1

Programming Exercise 3.9

Your program should look like the following (which is different than the book).

```
Enter employee's name: Chad Mano
Enter number of hours worked in a week: 40
Enter hourly pay rate: 12.75
Enter federal tax withholding rate (ex. 0.12): 0.11
Enter state tax withholding rate (ex. 0.06): 0.07
```

CHAD MANO PAY INFORMATION

```

        Pay
Hours Worked:           40
    Pay Rate: $       12.75
    Gross Pay: $      510.00

        Deductions
Federal Withholding (11.0%): $      56.10
    State Withholding (7.0%): $      35.70
    Total Deduction: $      91.80

        Net Pay: $      418.20
```

Make sure to read the rubric to see the additional requirements.

Rubric

- 10 pts: Software Development Lifecycle Plan (see below)
- 10 pts: User is prompted for input and can enter values properly
- 10 pts: Headings of sections are centered and spaces between sections
- 10 pts: Main output header is all capitalized
- 10 pts: Output numbers are right aligned with decimals aligned
- 10 pts: Colons and \$ signs are aligned
- 10 pts: No arithmetic calculations inside the print string (use variables)
- 10 pts: A single print statement is used for output
- 10 pts: All tested input results in proper output
- 5 pts: Proper naming conventions for variable names
- 5 pts: Proper comments at the top of the file with your name, assignment number, and description of the program.

Software Development Lifecycle Plan

Follow the software development lifecycle in your assignment. This should be simple. Similar to what we have done in class. Submit a report with:

1. Requirements specification
2. System analysis
3. System design
4. Implementation – This is just your code
5. Testing
 - a. Include at least 3 test cases you will run to assess your program
 - b. Each test case should have
 - i. Input
 - ii. Expected Output
 - c. Report if you ran into any problems and what you did to fix them. Write “NONE” if all tests passed on your first try.

Helpers

Remember that you can find solutions to the even programming exercises online. Check Canvas for a link. These are suggestions for you to do. They are not part of the assignment, and you do not have to turn them in.

Exercises: 3.4, 3.6, 3.8

What/How To Turn In (READ THIS)

Submit your files on Canvas.

Due: May 23, 2018