

# CS150 Assignment 3

## Paycheck Generator

**Date Assigned:** Friday, September 21, 2012

**Date Due:** Friday, September 28, 2012 1:00 pm

**Total Points:** 30 pts

For this project, you need to build a weekly paycheck generator for your employees.

The software must ask for the employee's first and last name, the number of hours worked, and the number of lines of code written that week.

Employees that worked more than 60 hours a week are paid \$45 an hour. Employees that worked 60 hours or less a week but more than 40 hours a week are paid \$35 an hour. All other employees are paid \$30 an hour.

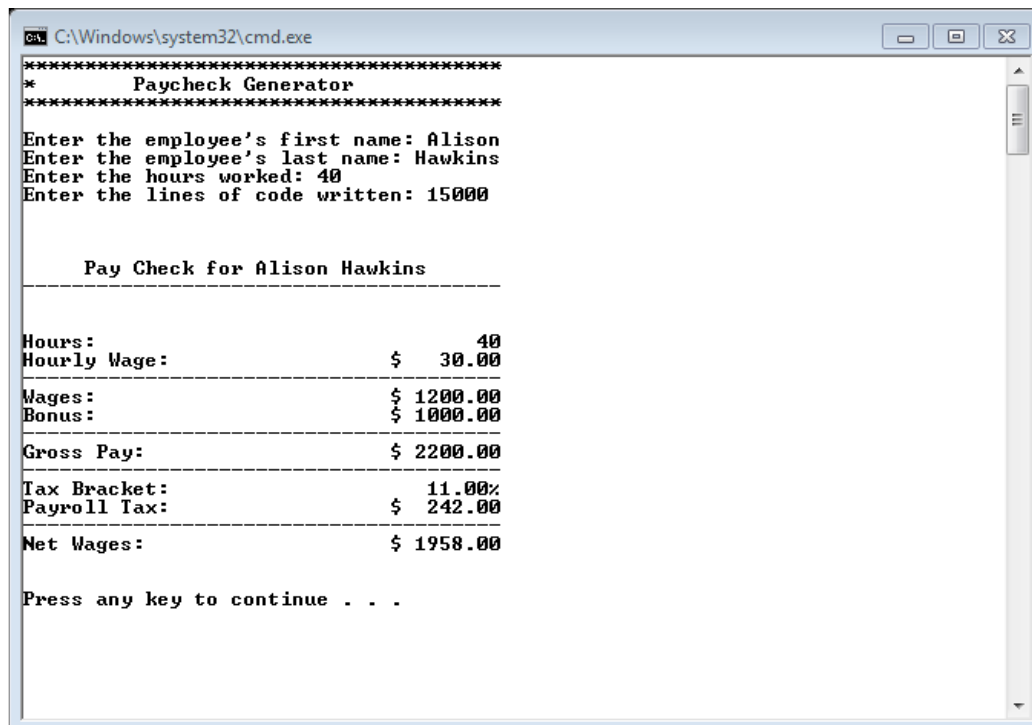
Any employee that writes more than 10,000 lines of code and who works 40 hours or less a week receives a bonus of \$1,000.

The paycheck generator must also deduct pay roll taxes from the employee's pay. The payroll tax is 17% for employees that make over \$2,500 a week, 11% for employees that make over \$1,900, but make \$2,500 or less a week, and 7% for everyone else.

All employees work less than 100 hours a week. No employee can receive credit for working a partial hour.

You need to display to the user the gross pay (before taxes), the tax paid, and the net pay (after taxes).

### Sample Output:



```
C:\Windows\system32\cmd.exe
*****
*      Paycheck Generator
*****
Enter the employee's first name: Alison
Enter the employee's last name: Hawkins
Enter the hours worked: 40
Enter the lines of code written: 15000

      Pay Check for Alison Hawkins
-----
Hours:                40
Hourly Wage:          $  30.00
-----
Wages:                $ 1200.00
Bonus:                $ 1000.00
-----
Gross Pay:            $ 2200.00
-----
Tax Bracket:          11.00%
Payroll Tax:          $  242.00
-----
Net Wages:            $ 1958.00

Press any key to continue . . .
```

```
C:\Windows\system32\cmd.exe
*****
*      Paycheck Generator
*****

Enter the employee's first name: Bob
Enter the employee's last name: Roberts
Enter the hours worked: 50
Enter the lines of code written: 90000

      Pay Check for Bob Roberts
-----

Hours:                                50
Hourly Wage:                          $ 35.00
-----
Wages:                                $ 1750.00
Bonus:                                 $   0.00
-----
Gross Pay:                             $ 1750.00
-----
Tax Bracket:                           7.00%
Payroll Tax:                           $ 122.50
-----
Net Wages:                              $ 1627.50

Press any key to continue . . .
```

```
C:\Windows\system32\cmd.exe
*****
*      Paycheck Generator
*****

Enter the employee's first name: Jennifer
Enter the employee's last name: Marsh
Enter the hours worked: 62
Enter the lines of code written: 200000

      Pay Check for Jennifer Marsh
-----

Hours:                                62
Hourly Wage:                          $ 45.00
-----
Wages:                                $ 2790.00
Bonus:                                 $   0.00
-----
Gross Pay:                             $ 2790.00
-----
Tax Bracket:                           18.00%
Payroll Tax:                           $ 502.20
-----
Net Wages:                              $ 2287.80

Press any key to continue . . .
```

**To complete this assignment you must submit the following:**

**1. An electronic copy of your program on Turing**

- a. Add a new project named 03\_PayCheckGenerator to your previously created assignment solution called PUNetIDAssignments. It is *vital* that you name your project correctly!
- b. Type your program (fully documented/commented) into the project. The comment block at the top of the program needs to contain your name, the date the assignment is due, the class name, assignment number and name, and a brief description of the program.
- c. Pay attention to the example output! Your program's output should look **exactly** like the example output! The spacing and newlines in your output must match exactly.
- d. Your program **must** use **if statements, constants, and logical operators**. There must be no magic constants in your solution.
- e. Make sure that your program compiles and runs correctly. If you get any errors, double check that you typed everything correctly. Be aware that C++ is case-sensitive.
- f. Once you are sure that the program works correctly it is time to submit your program. You do this by logging on to Turing and placing your complete solution folder in the **CS150-01 Drop** folder. This solution folder must contain: 01\_Fraction, 02\_Currency, and 03\_PayCheckGenerator.
- g. The program must be in the drop folder by 1:00pm on the day that it is due. Anything submitted after that will be considered late.

**2. A hard copy of your program**

- a. The hard copy must be placed on the instructor's desk by 1:00pm on the day that it is due.
- b. The hard copy must be printed in color, double-sided, and stapled in the upper-left corner if necessary. I do not bring a stapler to class.

**Good luck! And remember, if you have any problems, come and see straight away. ☺**

**The printers in Marsh are slow. Do NOT expect to be able to print your code 10 minutes before class!**