

Spring 2020, CS3300 – Assignment1 (100 points)

(Due Date: 11:59PM of 02/01/2020)

**Objective:** Basic Java console output format, Console input, conditional execution, arithmetic expressions.

**Submission:** Create only one .java file with main method. Submit (1) the .java file. (2) Screenshots of outputs of the test cases given. Do not submit .class file or the entire project.

**Note:**

- You might need conditional statements, modulus operator for integers. Put code within the main function.

An employee is paid at a rate of \$17.25 per hour for up to 40 regular hours worked in a week. If the employee works more than 40 hours, it is considered overtime. Any hours over 40 hours but less than or equal to 60 are paid at the overtime rate (\$12.34 per hour). Any hours over 60 hours but less than equal to 80 hours are paid at the overtime rate (\$14.34 per hour). Any hours over 80 hours are paid at the overtime rate (\$16.00 per hour).

From the worker's gross pay, 14% is withheld for federal income tax, 5% is withheld for state income tax. \$80 is withheld to cover the insurance of the worker and 2 dependents. If the worker has more than 2 dependents, then an additional \$25 is withheld per dependent for insurance. Write a Java program that will read in the name of the employee, number of hours worked in a week and the number of dependents as input. The program should then output the worker's name, number of dependents, gross pay, each withholding amount, and the net take-home pay for the week.

**Note that the ONLY INPUTS the user provides are**

- The employee's name.
- The number of hours worked in the week.
- The number of dependents.

Below are four Sample I/O

Net Paycheck Calculator

Employee's Name: John Smith  
Number of Hours Worked in a Week: 43  
Number of Employee's Dependents: 3

```
-----  
Employee's name           :John Smith  
Number of Dependents      :3  
Hours worked              :43  
Overtime hours            :3  
Gross Income              :$727.02  
State Tax Withheld @ 5%   :$36.35  
Federal Tax Withheld @ 14% :$101.78  
Worker and 2 Dependents' Insurance :$80.00  
Additional Dependents' Insurance :$25.00  
-----
```

Net Take Home Pay :\$483.89

Net Paycheck Calculator

Employee's Name: John Smith  
Number of Hours Worked in a Week: 63  
Number of Employee's Dependents: 0

---

Employee's name	:John Smith
Number of Dependents	:0
Hours worked	:63
Overtime hours	:23
Gross Income	:\$979.82
State Tax Withheld @ 5%	:\$48.99
Federal Tax Withheld @ 14%	:\$137.17
Worker and 2 Dependents' Insurance	:\$80.00
Additional Dependents' Insurance	:\$0.00

---

Net Take Home Pay :\$713.65

Net Paycheck Calculator

Employee's Name: John Smith  
Number of Hours Worked in a Week: 35  
Number of Employee's Dependents: 2

---

Employee's name	:John Smith
Number of Dependents	:2
Hours worked	:35
Overtime hours	:0
Gross Income	:\$603.75
State Tax Withheld @ 5%	:\$30.19
Federal Tax Withheld @ 14%	:\$84.53
Worker and 2 Dependents' Insurance	:\$80.00
Additional Dependents' Insurance	:\$0.00

---

Net Take Home Pay :\$409.04

# Net Paycheck Calculator

Employee's Name: John Smith  
Number of Hours Worked in a Week: 82  
Number of Employee's Dependents: 4

---

Employee's name	:John Smith
Number of Dependents	:4
Hours worked	:82
Overtime hours	:42
Gross Income	:\$1255.60
State Tax Withheld @ 5%	:\$62.78
Federal Tax Withheld @ 14%	:\$175.78
Worker and 2 Dependents' Insurance	:\$80.00
Additional Dependents' Insurance	:\$50.00
<hr/>	
Net Take Home Pay	:\$887.04