CP5639 - Assignment 1

**Problem:**

Invited by an enterprise, we are asked to develop a system for their accountants, which can calculate the salary of different types of employees according to different methods automatically.

**Information:**

Three types of employees and salary calculating method:

* (H) Hourly employee: according to hourly wage and target weekly work hours.
* Employees will get extra bonus if they work hours is beyond target hours.

|  |  |  |
| --- | --- | --- |
| target weekly work hours (hours/week) | hourly wage  ($/hour) | Extra Bonus beyond  target hours($/hour) |
| 20 | 10 | 12 |
| 32 | 15 | 18 |
| 40 | 20 | 24 |

* (C) Monthly contract employees: according to basic contract salary.
* In order to get basic contract salary, employee must work at least 18 day in one month and at least 8 hours in one working day (basic condition). If not, employees will only get salary by actual work hours corresponding with monthly (22 workdays) contract salary.
* Employees will get extra bonus if they work at public holidays or rest days.
* Employees will lose part salary if they absent at working day unless force majeure.
* Employees will get full attendance bonus if they present at every working day.
* Working at nonworkdays cannot replace workday to get full attendance bonus unless employees give up extra bonus of nonworkdays.

|  |  |  |  |
| --- | --- | --- | --- |
| Basic salary  ($/month) | Extra bonus  ($/day) | Deductible wage  ($/day) | Full attendance bonus($/month) |
| 3000 | 270 | 135 | 300 |
| 4000 | 360 | 180 | 400 |
| 5000 | 450 | 225 | 500 |

* (S) Salespeople: yearly basic salary and extra percentage commission (different percent according to total sales price) of his/her sales price yearly.
* Basic salary of salespeople is $40000/year.

|  |  |
| --- | --- |
| Total sales price | Commission Percent |
| <=$10 million | 0% |
| >$10 million and <=$30 million | 1% |
| >$30 million and <=$50 million | 2% |
| >=50 million | 3% |