ASSIGNMENT

- Ahlia company desires to generate its **payroll** via computer. the data collected in payroll department about the employee is his/her **Social Security Number**, **pay rate**, and **working hours**.

- Add to this, **overtime pay**, **Gross pay**, **tax withheld** (20% of gross pay), and net pay.

- Note that every employee should be given **overtime pay** 1.5 of **pay rate** in case that he worked a number of hours greater than **150** hours.

- Draw a flowchart that calculate the **Net Pay** for each employee in this company.

- Let's label the data items given to us in this problem with *variable names* as given below:

  - SSN ➜ Social Security Number
  - PR   ➜ Pay Rate
  - WH ➜ Working Hours
  - GP   ➜ Gross Pay
  - OP   ➜ Overtime Pay
  - TAX ➜ Tax Withheld
  - NP   ➜ Net Pay

```
                          ┌──────────┐
                          │  Start   │
                          └────┬─────┘
                               │
                               ▼
                        ╱───────────────╲
                       │  Input SSN,     │
                       │   HW, PR        │
                        ╲───────────────╱
                               │
                               ▼
                        ╱───────────╲        TRUE      ┌─────────────────────┐
                       │     Is      ├──────────────►  │        OP =          │──┐
                       │  HW > 150   │                 │  (HW-150) * 1.5*PR   │  │
                        ╲───────────╱                  └─────────────────────┘  │
            FALSE              │                                                 ▼
                               ▼                             ┌─────────────────────────┐
                    ┌───────────────────┐                    │   GP = 150* PR + OP     │
                    │   GP = HW* PR      │                    └─────────────┬───────────┘
                    └─────────┬──────────┘                                  │
                              │◄───────────────────────────────────────────┘
                              ▼
                    ┌───────────────────┐
                    │   TAX = GP * 0.20  │
                    └─────────┬──────────┘
                              ▼
                    ┌───────────────────┐
                    │    NP = GP - TAX   │
                    └─────────┬──────────┘
                              ▼
                      ╱───────────────╲
                     │  Print SSN, NP   │
                      ╲───────────────╱
                              │
       TRUE                   ▼
          ◄────────── ╱───────────────╲
                     │    Any more      │
                     │   Employees?     │
                      ╲───────────────╱
                              │  FALSE
                              ▼
                        ┌──────────┐
                        │   End    │
                        └──────────┘
```

Start

Input SSN, HW, PR

Is HW > 150

TRUE

OP = (HW-150) * 1.5*PR

GP = 150* PR + OP

FALSE

GP = HW* PR

TAX = GP * 0.20

NP = GP - TAX

Print SSN, NP

Any more Employees?

TRUE

FALSE

End