Chapter 11 Employee

Brian Veitch

Instructions:

**File 1:**

Write an Employee class that keeps data attributes for the following pieces of information:

* + Employee name
  + Employee number

Next, write a class named ProductionWorker that is a subclass of the Employee class. The ProductionWorker class should keep data attributes for the following information

* + Shift numbered (an integer, such as 1, 2, or 3)
  + Hourly pay rate

The workday is divided into two shifts: day and night. The shift attribute will hold an integer value representing the shift that the employee works. The day shift is shift 1 and the night shift is shift 2.

Write the appropriate accessor and mutator methods (get and set) for each class.

**File 2:**

Once you have written the classes, write a program that creates an object of the ProductionWorker class and prompts the user to enter data for each of the object’s data attributes. Store the data in the object and then use the object’s accessor methods to retrieve it and display it on the screen.

Classes:

|  |
| --- |
| Employee |
| - employee\_name: String  - employe\_number: String |
| \_\_init\_\_(employee\_name, employee\_number)  + set\_employee\_name(String)  + set\_employee\_number(String))  + get\_employee\_name  + get\_employee\_number |

|  |
| --- |
| ProductionWorker |
| - shift\_number: Int  - hourly\_rate: Float |
| \_\_init\_\_(employee\_name, employee\_number, hourly\_rate, shift\_number)  + set\_shift\_number(String)  + set\_hourly\_rate(Float)  + get\_shift\_number  + get\_hourly\_rate  + get\_shift\_description |

Data:

Classes  
 - Employee

- ProductionWorker

Variables

- production\_worker: ProductionWorker – info for production worker

User Input

- name: String – employee’s name

- number: String – employee’s number

- shift: Int – employee’s shift number

- hourly\_rate: Float – employee’s hourly pay rate

Processing:

* 1. Ask user for their name, employee number, hourly rate, and shift number
  2. Instantiate production\_worker: ProductionWorker with the user’s values
  3. Display the user’s values using the accessor functions

Output:

* 1. Display the employee’s name, number, hourly pay rate, and shift number.

Example:

Enter Employee Information

Name: Brian

Employee Number: abc123

Shift (1 = day, 2 = night): 2

Hourly pay rate: 53.21

Employee Information

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Employee: abc123 Brian

Shift: Night

Pay Rate: $53.21