

Programming Exercise 11-2

```
class Employee:
    def __init__(self, name, id_number):
        self.__name = name
        self.__id_number = id_number

    def set_name(self, name):
        self.__name = name

    def set_id_number(self, id_number):
        self.__id_number = id_number

    def get_name(self):
        return self.__name

    def get_id_number(self):
        return self.__id_number

class ProductionWorker(Employee):
    def __init__(self, name, id_number, shift_number, pay_rate):
        # Call superclass __init__ method.
        Employee.__init__(self, name, id_number)

        # Initialize the shift_number and pay_rate attributes.
        self.__shift_number = shift_number
        self.__pay_rate = pay_rate

    # Mutator functions for shift_number and pay_rate.
    def set_shift_number(self, shift_number):
        self.__shift_number = shift_number

    def set_pay_rate(self, pay_rate):
        self.__pay_rate = pay_rate

    # Accessor functions for shift_number and pay_rate.
    def get_shift_number(self):
        return self.__shift_number

    def get_pay_rate(self):
        return self.__pay_rate

class ShiftSupervisor(Employee):
    def __init__(self, name, id_number, salary, bonus):
        # Call superclass __init__ method.
        Employee.__init__(self, name, id_number)

        # Initialize the salary and bonus attributes.
        self.__salary = salary
        self.__bonus = bonus

    # Mutator functions for salary and bonus.
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def set_salary(self, salary):
    self.__salary = salary

def set_bonus(self, bonus):
    self.__bonus = bonus

# Accessor functions for salary and bonus.
def get_salary(self):
    return self.__salary

def get_bonus(self):
    return self.__bonus

# Exercise 11-2.py
import emp

def main():
    # Local variables
    super_name= ''
    super_id = ''
    super_salary = 0.0
    super_bonus = 0.0

    # Get data attributes.
    super_name = input('Enter the name: ')
    super_id = input('Enter the ID number: ')
    super_salary = float(input('Enter the annual salary: '))
    super_bonus = float(input('Enter the bonus: '))

    # Create an instance of ShiftSupervisor.
    supervisor = emp.ShiftSupervisor(super_name, super_id, \
                                     super_salary, super_bonus)

    # Display information.
    print ('Shift supervisor worker information: ')
    print ('Name:', supervisor.get_name())
    print ('ID number:', supervisor.get_id_number())
    print ('Annual Salary: $', \
          format(supervisor.get_salary(), ',.2f'), \
          sep = '')
    print ('Annual Production Bonus: $', \
          format(supervisor.get_bonus(), ',.2f'), \
          sep = '')

# Call the main function.
main()

```