

COM/B/01-00106/2018

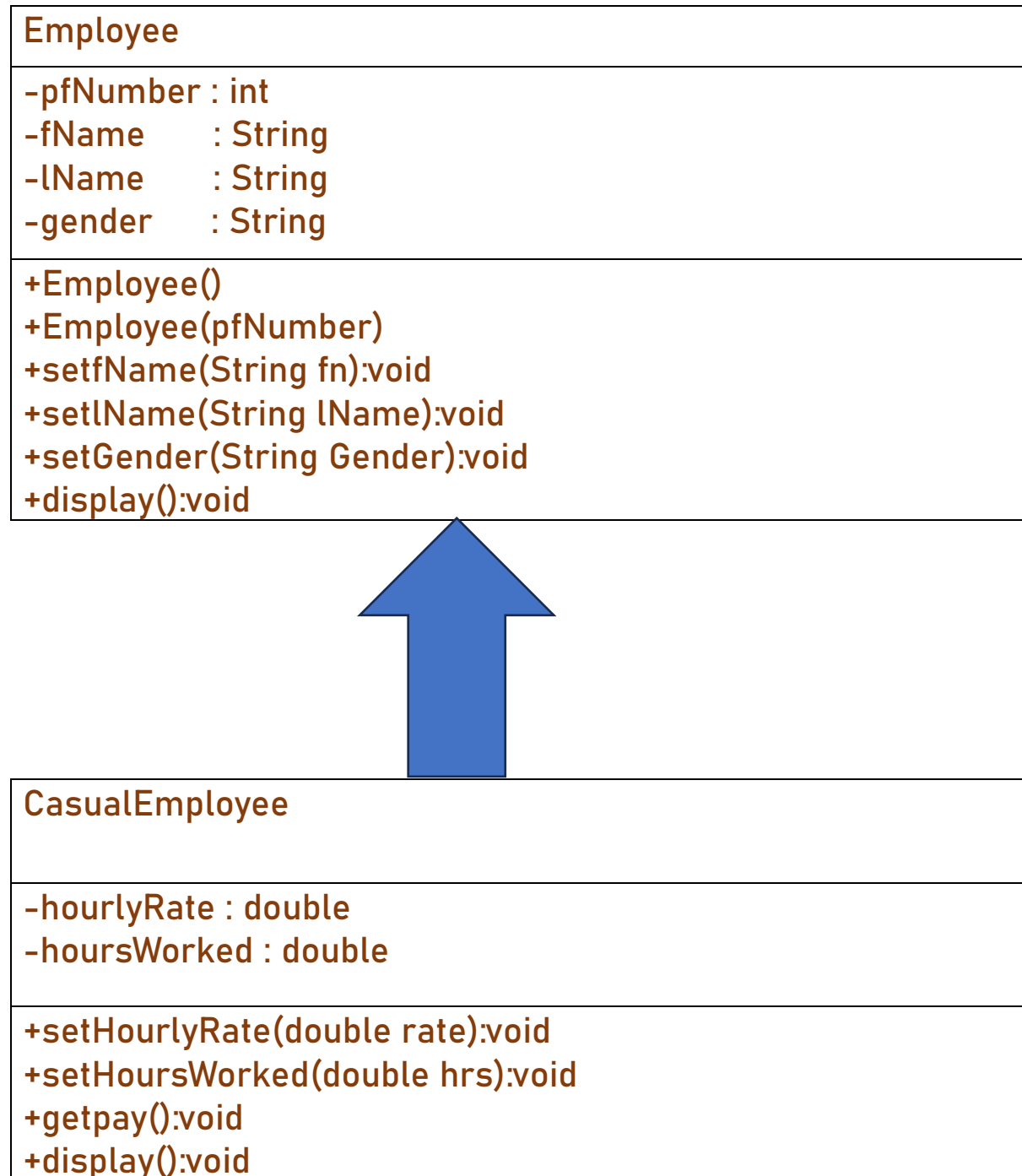
BORNFACE SONYE

BCS 366 ASSIGNMENT

BORNFACE SONYE

MMUST 50100

The Employee and Casual Employee UML Diagram



The Code Below Implements the UML Diagram above

```
class Employee {  
    private int pfNumber;  
    private String fName;  
    private String lName;  
    private String gender;  
  
    public Employee() {  
    }  
  
    public Employee(int pfNumber) {  
        this.pfNumber = pfNumber;  
    }  
  
    public void setfName(String fName) {  
        this.fName = fName;  
    }  
    public void setlName(String lName) {  
        this.lName = lName;  
    }  
}
```

```
public void setGender(String gender) {
    this.gender = gender;
}

public void display() {
    System.out.println("Employee Details:");
    System.out.println("PF Number: " + pfNumber);
    System.out.println("First Name: " + fName);
    System.out.println("Last Name: " + lName);
    System.out.println("Gender: " + gender);
}
}

class CasualEmployee extends Employee {
    private double hourlyRate;
    private double hoursWorked;

    public void setHourlyRate(double rate) {
        this.hourlyRate = rate;
    }

    public void setHoursWorked(double hrs) {
        this.hoursWorked = hrs;
    }
}
```

```
public double getPay() {
    return hourlyRate * hoursWorked;
}

@Override
public void display() {
    super.display();
    System.out.println("Hourly Rate: " + hourlyRate);
    System.out.println("Hours Worked: " + hoursWorked + "
hours");
    System.out.println("Total Pay: " + getPay());
}
}

public class TestEmployee {
    public static void main(String[] args) {
        Employee employee1 = new Employee(106);
        employee1.setfName("Bornface");
        employee1.setlName("Sonye");
        employee1.setGender("Male");

        CasualEmployee employee2 = new CasualEmployee();
        employee2.setHourlyRate(350.0);
    }
}
```

```
employee2.setHoursWorked(40);  
employee2.setfName("Vivian");  
employee2.setlName("Achien'g");  
employee2.setGender("Female");
```

```
employee1.display();  
System.out.println();
```

```
employee2.display();  
}  
}
```