

1. What design principles does this code violate?
2. Refactor the code to improve its design.

```
class Employee {  
    ...  
    private Date employmentStartDate;  
    private Date employmentEndDate;  
}  
  
class RetirementCalculator {  
    private Employee employee;  
  
    public RetirementCalculator(Employee emp) {  
        this.employee = emp;  
    }  
  
    public float calculateRetirement(Date payPeriodStart, Date payPeriodEnd) { ... }  
  
    private int getTotalYearsOfService(Date startDate, Date endDate) { ... }  
  
    private int getMonthsInLastPosition(Date startDate, Date endDate) { ... }  
    ...  
}
```

