

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) { ... }
```

```
    ...
```

```
}
```