

```
File Edit Selection View Go Run ... Java Development
```

```
EXPLORER
```

```
▼ JAVA DEVELOPMENT
```

```
> Assingment-1
```

```
> Assingment-2
```

```
> Assingment-3
```

```
> Assingment-4
```

```
> Assingment-5
```

```
> Homeworks
```

```
▼ lib
```

```
J Bank.class
```

```
J Kiiitian.class
```

```
J Kiiitian$Main.class
```

```
J Main.class
```

```
J Main.java
```

```
J PNB.class
```

```
J SBI.class
```

```
J Student.class
```

```
J TestBank.class
```

```
▼ OUTLINE
```

```
▼ TIMELINE
```

```
▼ JAVA PROJECTS
```

```
Main.java Bank.class
```

```
Main.java > Main > main(String[])
```

```
1 interface Motor {
```

```
2     int capacity = 100;
```

```
3     void run();
```

```
4     void consume();
```

```
5 }
```

```
6 class WashingMachine implements Motor{
```

```
7     public void run() {
```

```
8         System.out.println(x:"The Washing machine is running.");
```

```
9     }
```

```
10    public void consume() {
```

```
11        System.out.println(x:"The washing machine is consuming electricirty.");
```

```
12    }
```

```
13    void checkCapacity(){
```

```
14        System.out.println("Capacity of the motor is" + capacity);
```

```
15    }
```

```
16 }
```

```
17 public class Main {
```

```
18     Run | Debug
```

```
19     public static void main(String[] args) {
```

```
20         WashingMachine washmachine = new WashingMachine();
```

```
21         washmachine.run();
```

```
22         washmachine.consume();
```

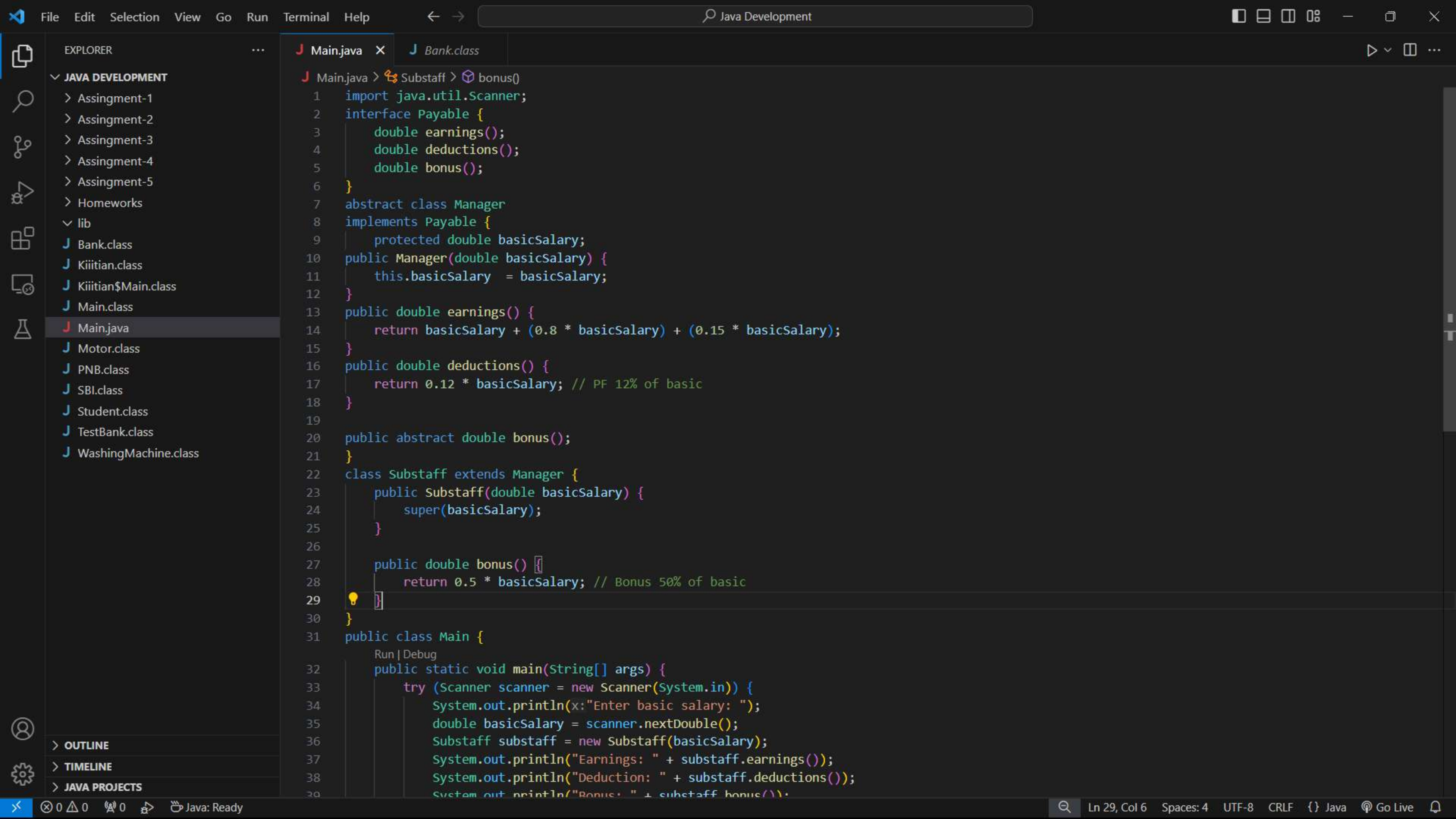
```
23         washmachine.checkCapacity();
```

```
24     }
```

```
25 }
```

```
Ln 22, Col 37 Spaces: 4 UTF-8 CRLF { } Java Go Live
```

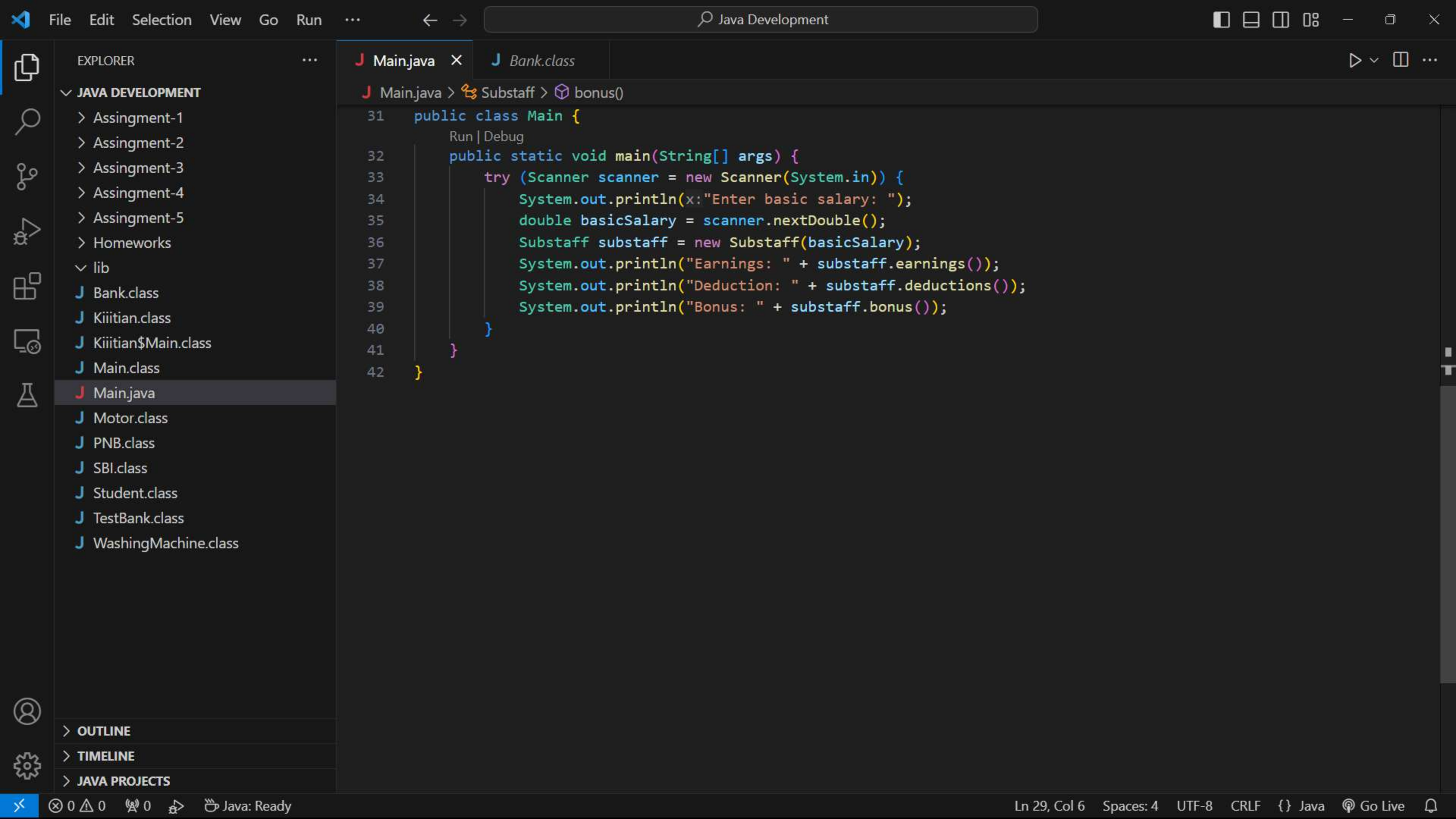
The image shows the Visual Studio Code interface. On the left, the Explorer sidebar displays a project named 'JAVA DEVELOPMENT'. Under a 'lib' folder, several Java class files are listed: 'Bank.class', 'Kiiitian.class', 'Kiiitian\$Main.class', 'Main.class', 'Main.java' (which is selected and highlighted), 'Motor.class', 'PNB.class', 'SBI.class', 'Student.class', 'TestBank.class', and 'WashingMachine.class'. The main editor area on the right shows the 'TERMINAL' tab. The terminal output includes the standard Windows PowerShell copyright notice, a message to install the latest PowerShell, and the execution of a Java command. The command is: `PS C:\Users\KIIT\Pictures\Screenshots\Java Development> & 'C:\Program Files\Java\jdk-18.0.2\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\KIIT\AppData\Roaming\Code\User\workspaceStorage\8f8f4b9861c14fde0de1371c967f49f4\redhat.java\jdt_ws\Java Development_59e93592\bin' 'Main'`. The output of this command is: `The Washing machine is running.`, `The washing machine is consuming electricirty.`, and `Capacity of the motor is100`. The terminal prompt is currently at `PS C:\Users\KIIT\Pictures\Screenshots\Java Development>`. On the far right, a vertical toolbar contains icons for 'Code', 'Run: Main', and other development actions.



```
File Edit Selection View Go Run Terminal Help
Java Development

EXPLORER
  JAVA DEVELOPMENT
    > Assingment-1
    > Assingment-2
    > Assingment-3
    > Assingment-4
    > Assingment-5
    > Homeworks
    > lib
      J Bank.class
      J Kiiitian.class
      J Kiiitian$Main.class
      J Main.class
      J Main.java
      J Motor.class
      J PNB.class
      J SBI.class
      J Student.class
      J TestBank.class
      J WashingMachine.class

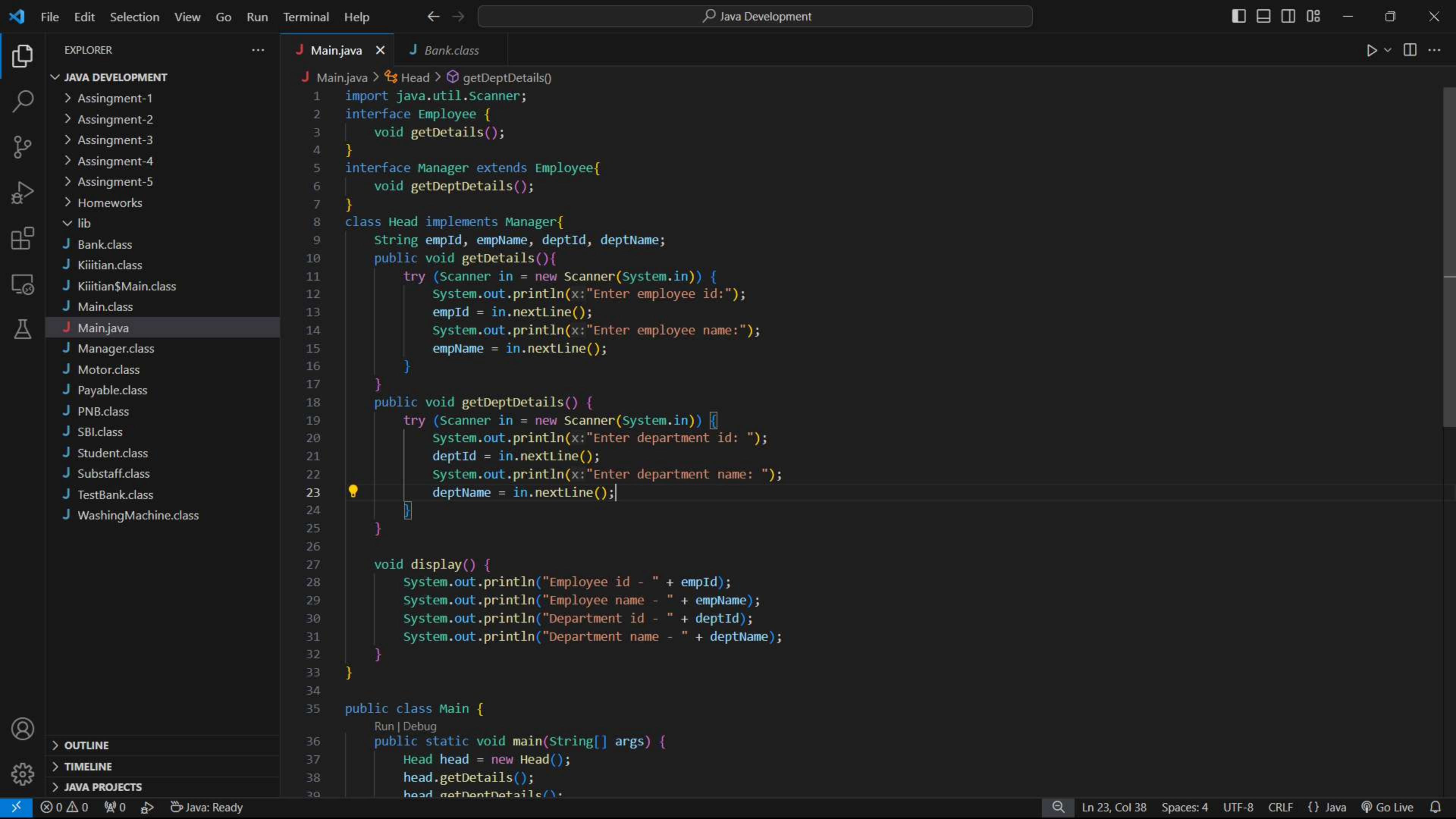
Main.java
1  import java.util.Scanner;
2  interface Payable {
3      double earnings();
4      double deductions();
5      double bonus();
6  }
7  abstract class Manager
8  implements Payable {
9      protected double basicSalary;
10 public Manager(double basicSalary) {
11     this.basicSalary = basicSalary;
12 }
13 public double earnings() {
14     return basicSalary + (0.8 * basicSalary) + (0.15 * basicSalary);
15 }
16 public double deductions() {
17     return 0.12 * basicSalary; // PF 12% of basic
18 }
19
20 public abstract double bonus();
21 }
22 class Substaff extends Manager {
23     public Substaff(double basicSalary) {
24         super(basicSalary);
25     }
26
27     public double bonus() {
28         return 0.5 * basicSalary; // Bonus 50% of basic
29     }
30 }
31 public class Main {
32     public static void main(String[] args) {
33         try (Scanner scanner = new Scanner(System.in)) {
34             System.out.println("Enter basic salary: ");
35             double basicSalary = scanner.nextDouble();
36             Substaff substaff = new Substaff(basicSalary);
37             System.out.println("Earnings: " + substaff.earnings());
38             System.out.println("Deduction: " + substaff.deductions());
39             System.out.println("Bonus: " + substaff.bonus());
40         }
41     }
42 }
```

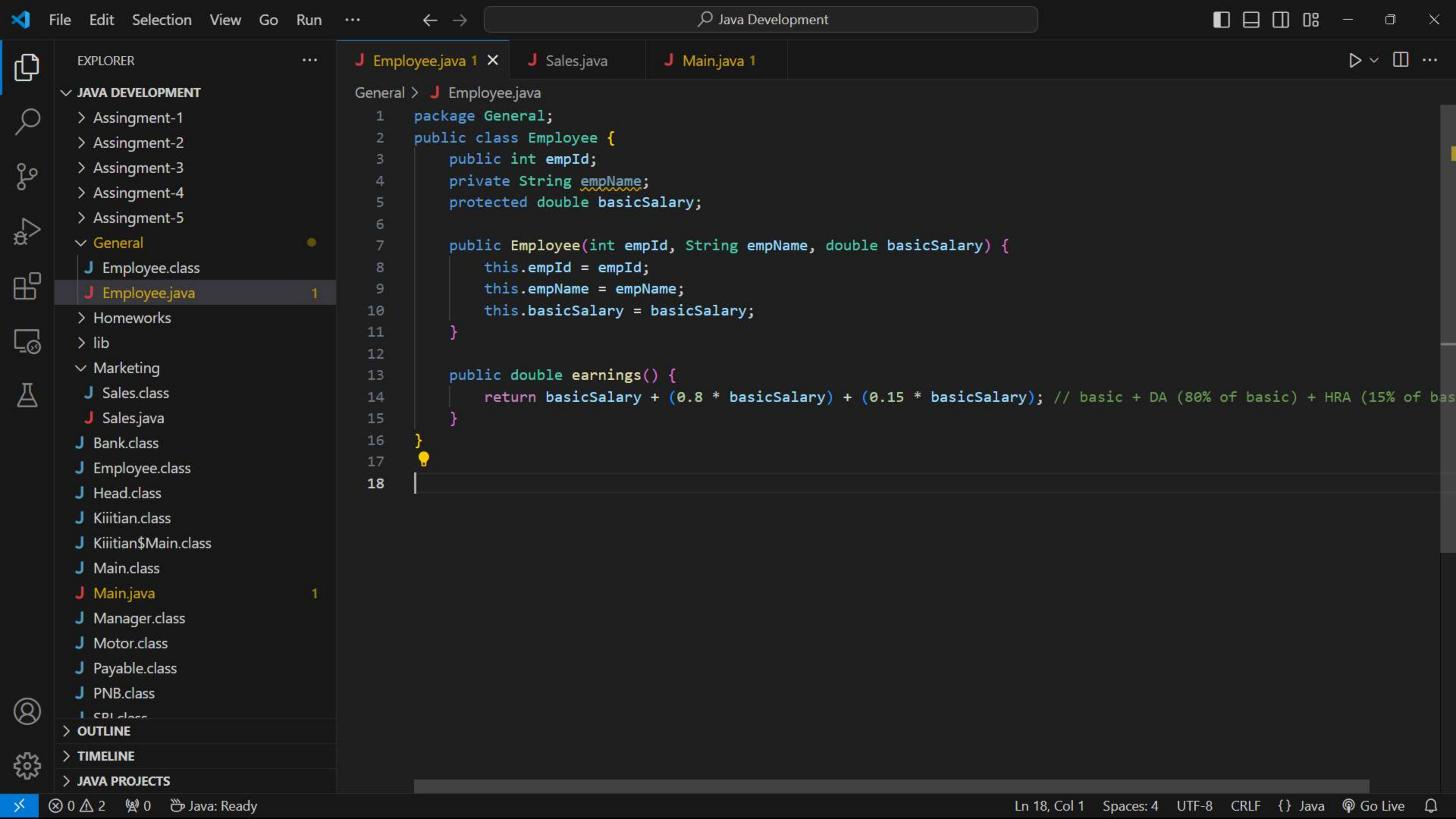


The screenshot displays the Visual Studio Code IDE interface. On the left, the Explorer panel shows a project structure under 'JAVA DEVELOPMENT' with folders 'Assingment-1' through 'Assingment-5' and 'Homeworks', and a 'lib' folder containing several Java class files. 'Main.java' is selected. The bottom of the Explorer panel has tabs for 'OUTLINE', 'TIMELINE', and 'JAVA PROJECTS'. The central Terminal panel shows a PowerShell session with the following commands and output:

```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ; if ($?) { javac Main.java } ; if ($?) { java Main }
Enter basic salary:
50000
Earnings: 97500.0
Deduction: 6000.0
Bonus: 25000.0
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

On the right, the 'Run and Debug' panel shows a list of 'Code' files and a 'Run: Main' button, indicating the current execution target.





EXPLORER

▼ JAVA DEVELOPMENT

> Assingment-1

> Assingment-2

> Assingment-3

> Assingment-4

> Assingment-5

▼ General

J Employee.class

J Employee.java 1

> Homeworks

> lib

▼ Marketing

J Sales.class

J Sales.java

J Bank.class

J Employee.class

J Head.class

J Kiiitian.class

J Kiiitian\$Main.class

J Main.class

J Main.java 1

J Manager.class

J Motor.class

J Payable.class

J PNB.class

J SPL.class

> OUTLINE

> TIMELINE

> JAVA PROJECTS

J Employee.java 1 X

J Sales.java

J Main.java 1

General > J Employee.java

1 package General;

2 public class Employee {

3 public int empId;

4 private String empName;

5 protected double basicSalary;

6

7 public Employee(int empId, String empName, double basicSalary) {

8 this.empId = empId;

9 this.empName = empName;

10 this.basicSalary = basicSalary;

11

12

13 public double earnings() {

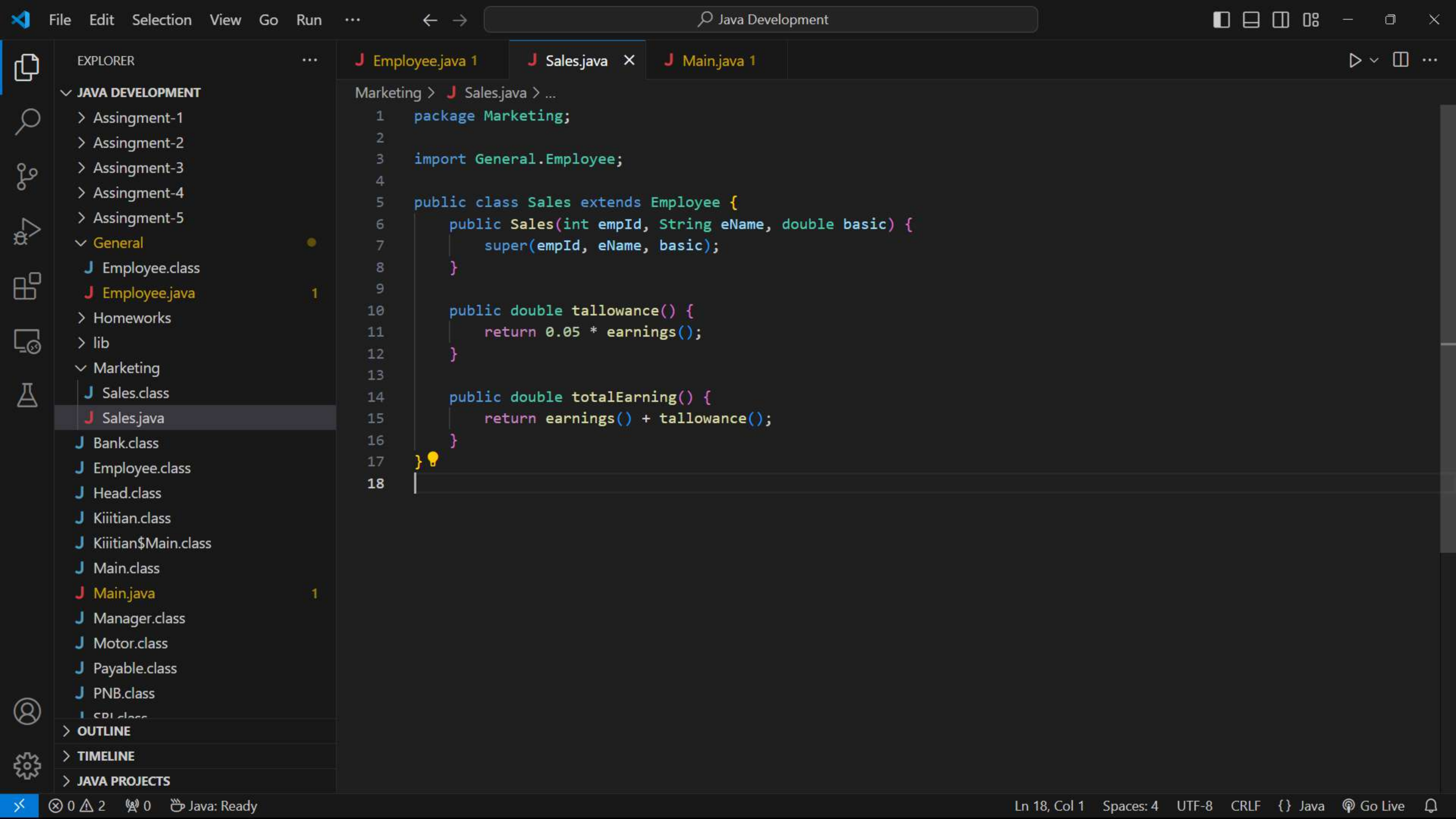
14 return basicSalary + (0.8 * basicSalary) + (0.15 * basicSalary); // basic + DA (80% of basic) + HRA (15% of basic)

15

16 }

17

18



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EXPLOLER
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> Assingment-5
```

```
▼ General
```

```
  J Employee.class
```

```
  J Employee.java 1
```

```
> Homeworks
```

```
> lib
```

```
▼ Marketing
```

```
  J Sales.class
```

```
  J Sales.java
```

```
  J Bank.class
```

```
  J Employee.class
```

```
  J Head.class
```

```
  J Kiiitian.class
```

```
  J Kiiitian$Main.class
```

```
  J Main.class
```

```
  J Main.java 1
```

```
  J Manager.class
```

```
  J Motor.class
```

```
  J Payable.class
```

```
  J PNB.class
```

```
  J SPI.class
```

```
> OUTLINE
```

```
> TIMELINE
```

```
> JAVA PROJECTS
```

```
J Employee.java 1
```

```
J Sales.java X
```

```
J Main.java 1
```

```
Marketing > J Sales.java > ...
```

```
1 package Marketing;
```

```
2
```

```
3 import General.Employee;
```

```
4
```

```
5 public class Sales extends Employee {
```

```
6     public Sales(int empId, String eName, double basic) {
```

```
7         super(empId, eName, basic);
```

```
8     }
```

```
9
```

```
10    public double tallowance() {
```

```
11        return 0.05 * earnings();
```

```
12    }
```

```
13
```

```
14    public double totalEarning() {
```

```
15        return earnings() + tallowance();
```

```
16    }
```

```
17 }
```

```
18
```

```
Ln 18, Col 1 Spaces: 4 UTF-8 CRLF {} Java Go Live
```

