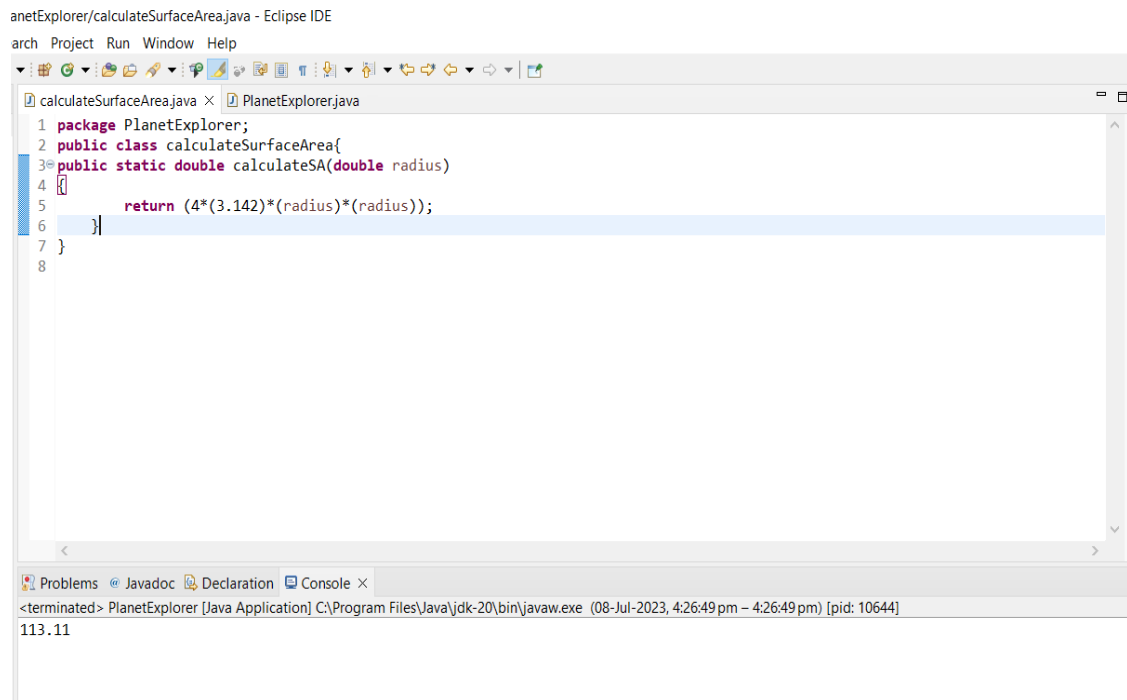


## Program-11:

### **solution:**

```
package PlanetExplorer;
public class calculateSurfaceArea{
public static double calculateSA(double radius)
{
    return (4*(3.142)*(radius)*(radius));
}
}
package PlanetExplorer;
public class PlanetExplorer {
    public static void main(String[] args) {
        System.out.printf("%.2f",calculateSurfaceArea.calculateSA(3.0));
    }
}
```



## Program-12:

### Solution:

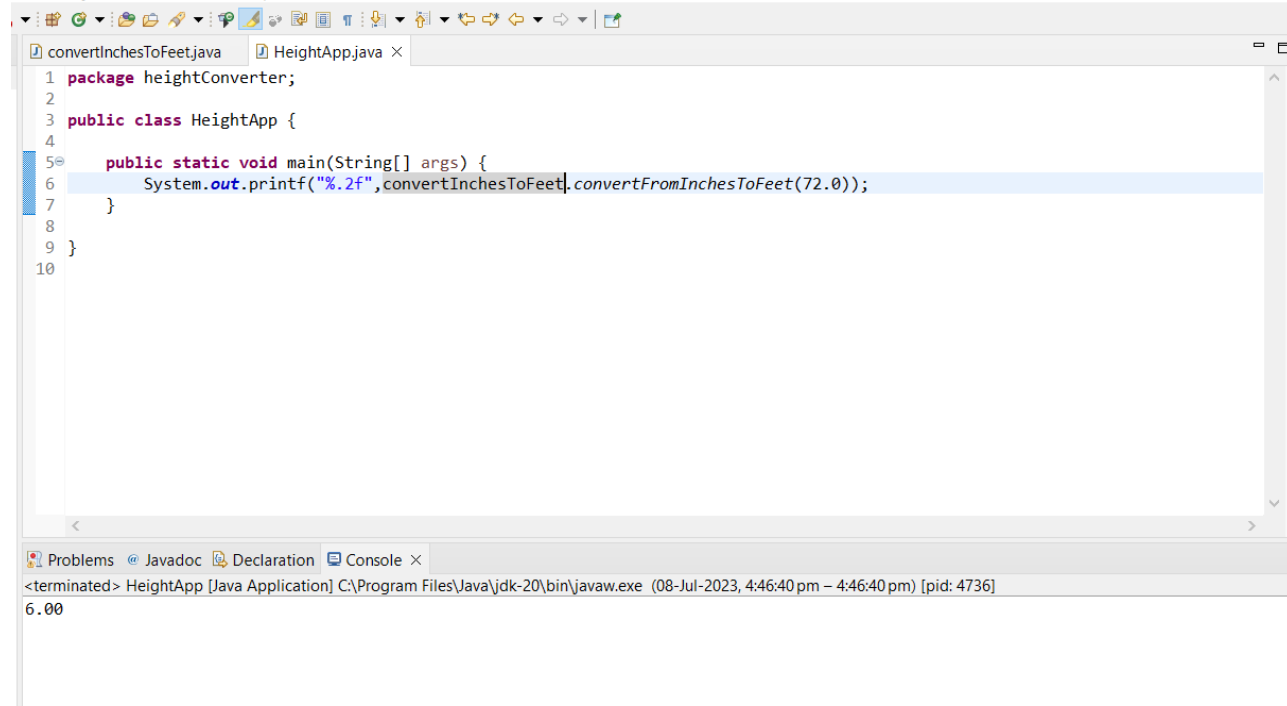
```
package heightConverter;  
public class convertInchesToFeet {  
    public static double convertFromInchesToFeet(double inches) {  
        return (inches/12.0);  
    }  
}
```

```
package heightConverter;  
public class HeightApp {  
    public static void main(String[] args) {
```

```
        System.out.printf("%.2f",convertInchesToFeet.convertFromInchesToFeet(72.0));  
    }  
}
```

/heightConverter/HeightApp.java - Eclipse IDE

Search Project Run Window Help



```
1 package heightConverter;  
2  
3 public class HeightApp {  
4  
5     public static void main(String[] args) {  
6         System.out.printf("%.2f",convertInchesToFeet.convertFromInchesToFeet(72.0));  
7     }  
8  
9 }  
10
```

Problems Javadoc Declaration Console ×

<terminated> HeightApp [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (08-Jul-2023, 4:46:40 pm – 4:46:40 pm) [pid: 4736]

6.00

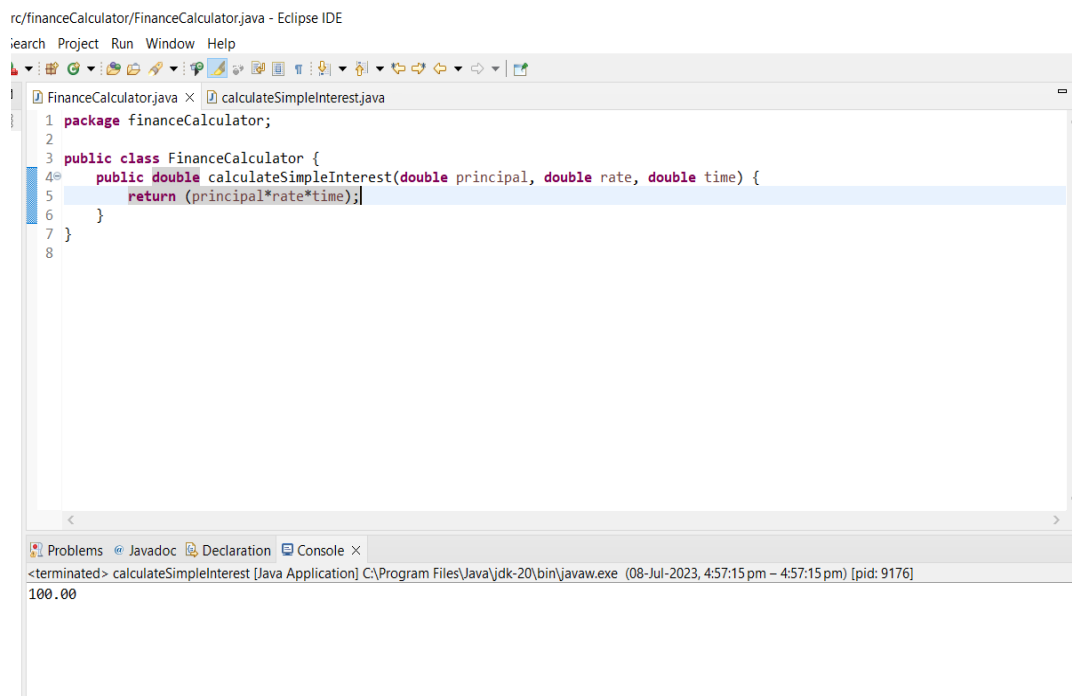
## Program-13:

### Solution:

```
package financeCalculator;

public class FinanceCalculator {
    public double calculateSimpleInterest(double principal, double rate, double time)
    {
        return (principal*rate*time);
    }
}

package financeCalculator;
public class calculateSimpleInterest {
    public static void main(String[] args) {
        FinanceCalculator calculator = new FinanceCalculator();
        System.out.printf("%.2f",calculator.calculateSimpleInterest(1000.0, 0.05, 2.0));
    }
}
```



rc/financeCalculator/FinanceCalculator.java - Eclipse IDE

Search Project Run Window Help

FinanceCalculator.java × calculateSimpleInterest.java

```
1 package financeCalculator;
2
3 public class FinanceCalculator {
4     public double calculateSimpleInterest(double principal, double rate, double time) {
5         return (principal*rate*time);
6     }
7 }
8
```

Problems Javadoc Declaration Console ×

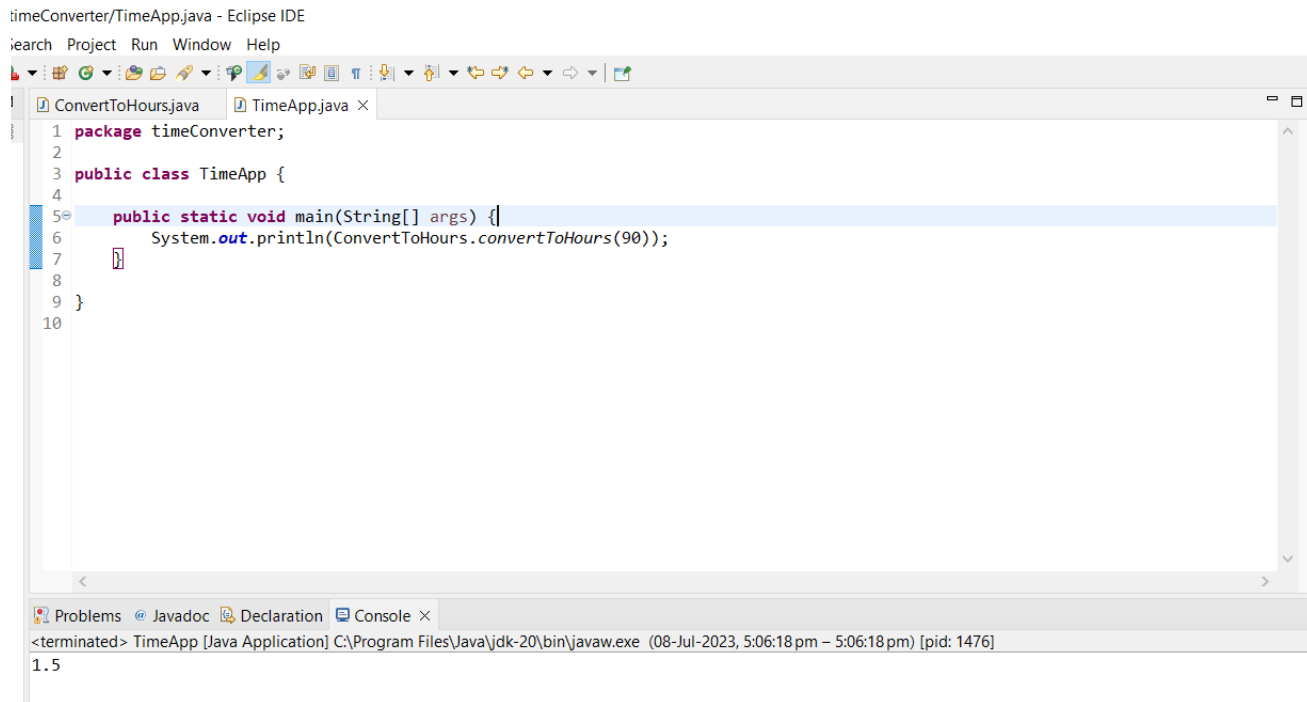
<terminated> calculateSimpleInterest [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (08-Jul-2023, 4:57:15 pm – 4:57:15 pm) [pid: 9176]

100.00

## Program-14:

### Solution:

```
package timeConverter;
public class ConvertToHours {
    public static double convertToHours(int minutes) {
        return (minutes/60.0);
    }
}
package timeConverter;
public class TimeApp {
    public static void main(String[] args) {
        System.out.println(ConvertToHours.convertToHours(90));
    }
}
```



The screenshot shows the Eclipse IDE interface. The editor window displays the following Java code:

```
1 package timeConverter;
2
3 public class TimeApp {
4
5     public static void main(String[] args) {
6         System.out.println(ConvertToHours.convertToHours(90));
7     }
8 }
9
10
```

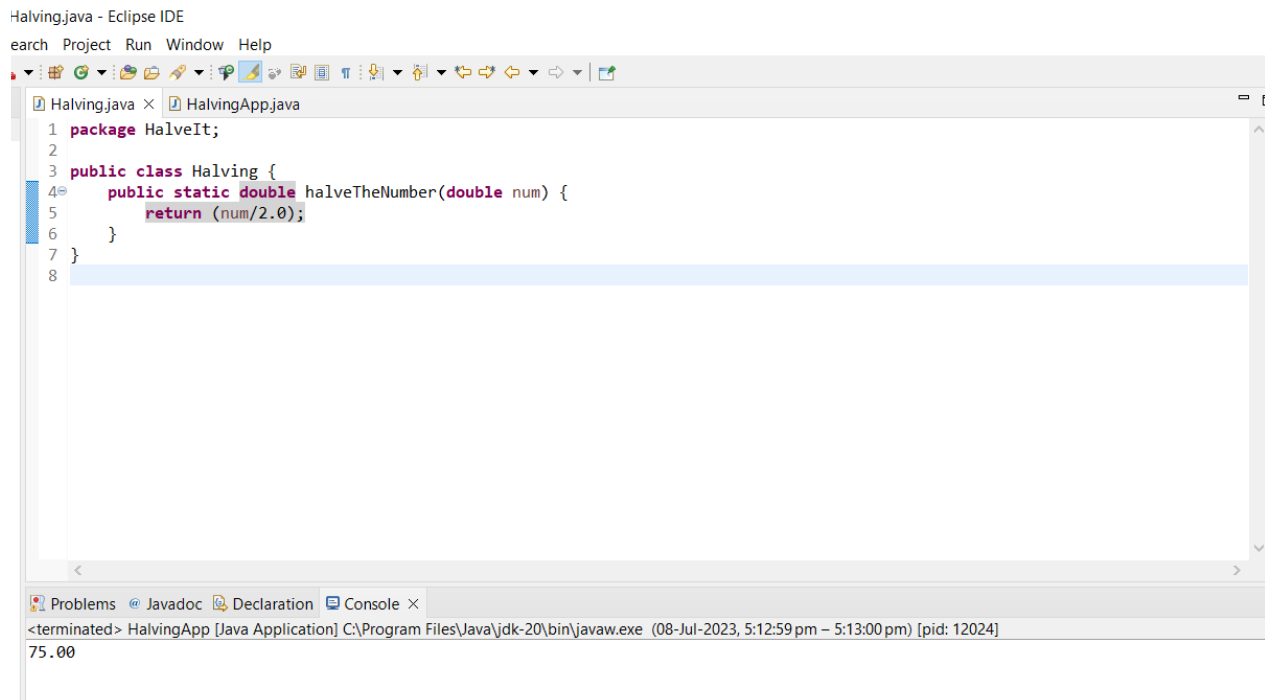
The console at the bottom shows the output of the program:

```
<terminated> TimeApp [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (08-Jul-2023, 5:06:18 pm - 5:06:18 pm) [pid: 1476]
1.5
```

## Program-15:

### Solution:

```
package HalveIt;
public class Halving {
    public static double halveTheNumber(double num) {
        return (num/2.0);
    }
}
package HalveIt;
public class HalvingApp {
    public static void main(String[] args) {
        System.out.printf("%.2f",Halving.halveTheNumber(150.00));
    }
}
```



The screenshot shows the Eclipse IDE interface. The top toolbar includes icons for search, project, run, window, and help. The main editor window displays the code for HalvingApp.java, which is identical to the code provided in the solution. The code is as follows:

```
1 package HalveIt;
2
3 public class Halving {
4     public static double halveTheNumber(double num) {
5         return (num/2.0);
6     }
7 }
8
```

At the bottom of the IDE, the Console window is open, showing the output of the program:

```
<terminated> HalvingApp [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (08-Jul-2023, 5:12:59 pm - 5:13:00 pm) [pid: 12024]
75.00
```