

JAGYASINI RAUTRAY



✉ rautrayment@gmail.com

☎ 8249695758

📍 PL-1752 , Biswanath Nagar,BJB Nagar, Bhubaneswar

🌐 <https://www.linkedin.com/in/jagyasini-rautray-29b248250>

🚀 SKILLS

C Python Data Structures

C++ HTML SQL

Java CSS Algorithms

ReactJs Snowflake

👤 PERSONAL DETAILS

Date of Birth : 01/01/2002

Gender : Female

Languages : English ,Hindi, Odia
Known

❤️ INTERESTS

Painting Travelling

Volunteering. Dance

➕ ADDITIONAL INFORMATION

Participated in NCC in National level rifle shooting

Vice Captain in school

Trained in odissi dance

🎯 OBJECTIVE

To enhance my professional skills, capabilities and knowledge in an organization which recognizes the value of hard work and trusts me with responsibilities and challenges

🎓 EDUCATION

B.Tech (Computer science and engineering) 07/2019-07/2023
ITER(SOA University)
7.89 CGPA

12th (Senior secondary) 04/2018-04/2019
Buxi Jagabandhu English Medium school(CBSE)
62.6 %

10th (Secondary) 04/2016-04/2017
Buxi Jagabandhu English Medium school (CBSE)
83.6%

💼 EXPERIENCE

Analyst trainee intern 01/06/2022 - 01/06/2023
Highradius Technologies
Working as a tester and debugger for the defects on Salesforce. Our work is to optimise, clean and make data processing faster for the clients using technologies like SQL and Snowflake.

💡 PROJECTS

AI Enabled fintech B2B invoice Management Application

Full stack project which predicts the invoice date and automates the whole process. Technology used automates the whole process. Technology used python,java,react,html,css and javascript.

Internet of Things (IOT) using Python - Diwali light Decoration

Created Iot enabled diwali lights whose color can be controlled over Wi-Fi wirelessly from anywhere using Raspberry pi pico

🏆 ACHIEVEMENTS & AWARDS

Python Data Structures (University of Michigan) -Coursera

Crash course on Python (Google)-Coursera

Foundations:Data,Data, Everywhere (Google)-Coursera

HTML,CSS,and JavaScript for web developers(John Hopkins University)-Coursera

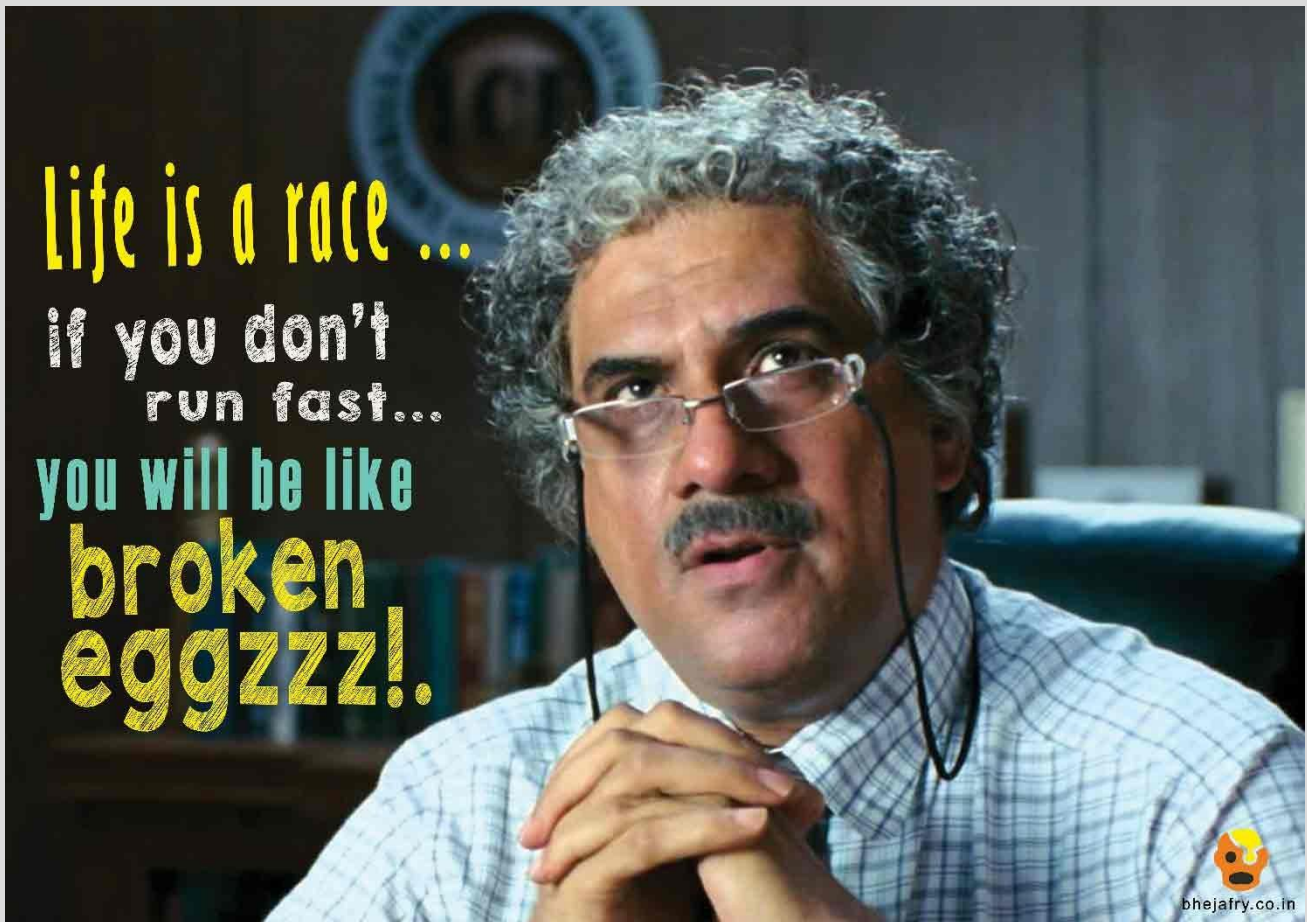
Bootcamp on JavaScript &Backend with node js by ShapeAI

Bootcamp on Python and Machine learning by ShapeAI

jagyasini rautray

Typecasting Assignment

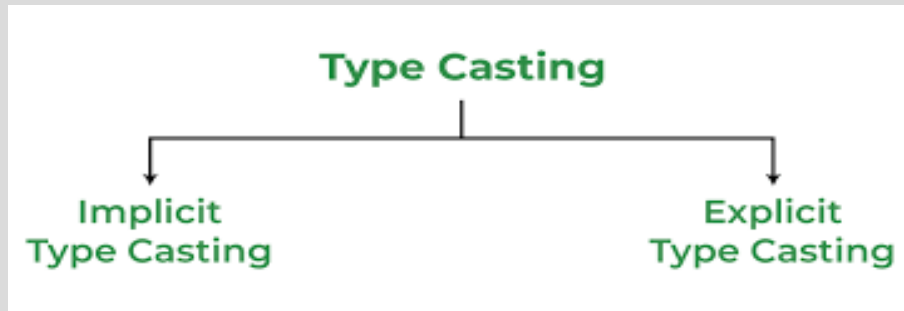
LIFE IS A RACE LETS BEGAN....



Submitted By: -Jagyasini Rautray

Submitted To: -Punith Sir

Lets start:



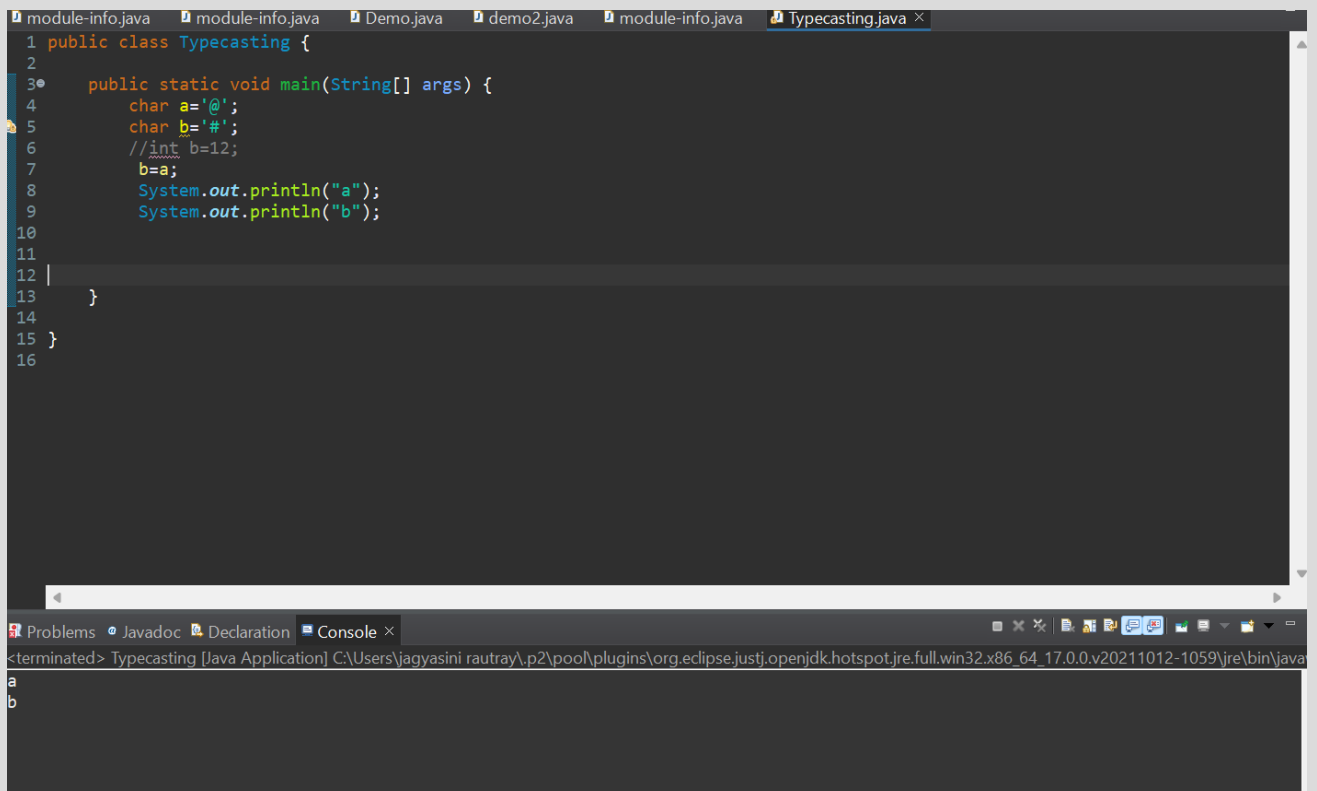
Introduction:

The process of converting the data of one type to another in technology is called Type casting.

There are two types:

- Implicit typecasting (Widening)
- Explicit typecasting (Narrowing)

Char to char:



The screenshot shows the Eclipse IDE with a project named 'Typecasting.java'. The code defines a public class 'Typecasting' with a main method. Inside the main method, two character variables are declared: 'a' is assigned '@' and 'b' is assigned '#'. There is a commented-out line for an integer variable 'b' assigned 12. The program then prints the values of 'a' and 'b' to the console. The console output shows 'a' followed by 'b' on separate lines.

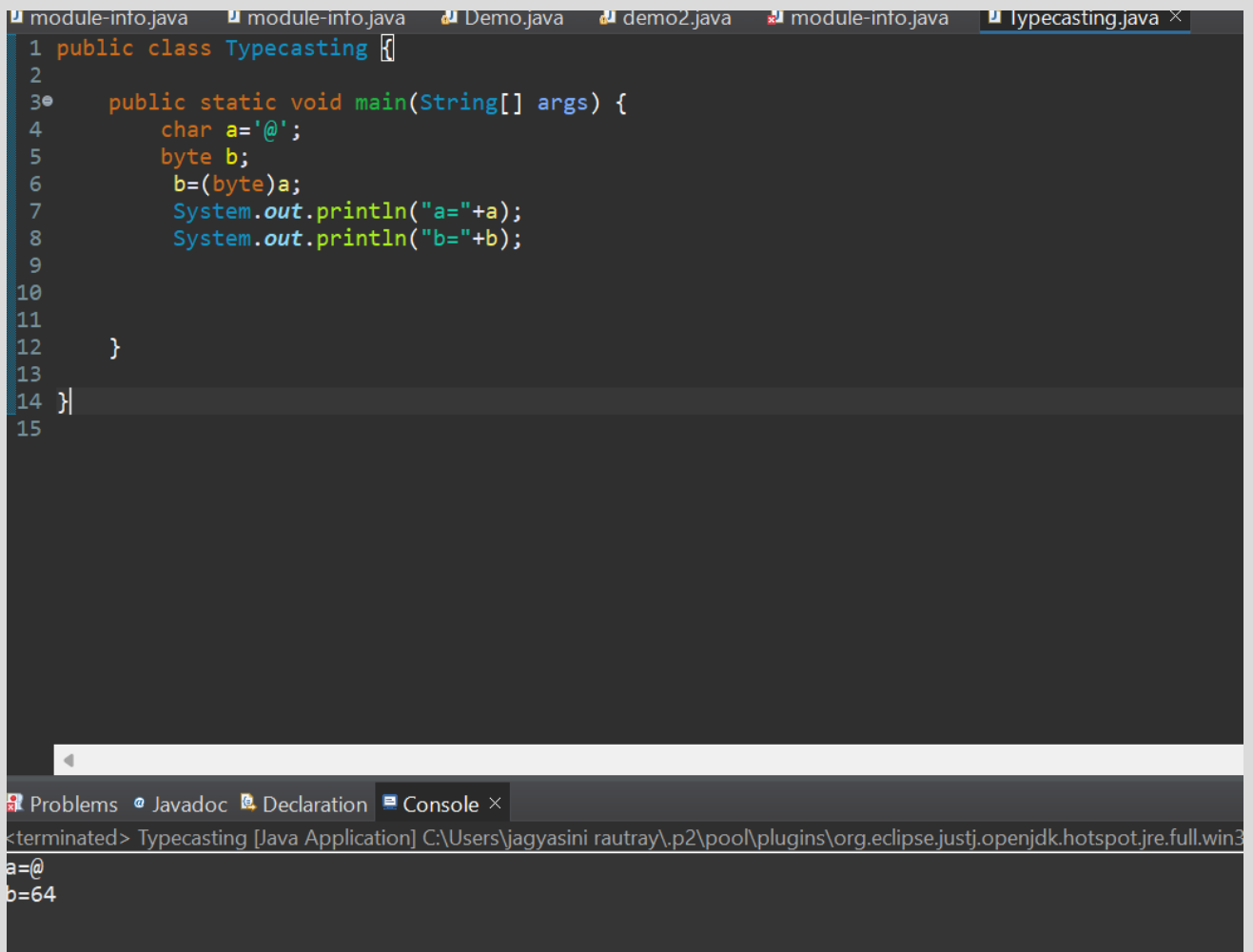
```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         char a='@';
5         char b='#';
6         //int b=12;
7         b=a;
8         System.out.println("a");
9         System.out.println("b");
10
11
12 |
13 }
14
15 }
16
```

Console Output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\java
a
b
```

//No conversion required

Char to byte:



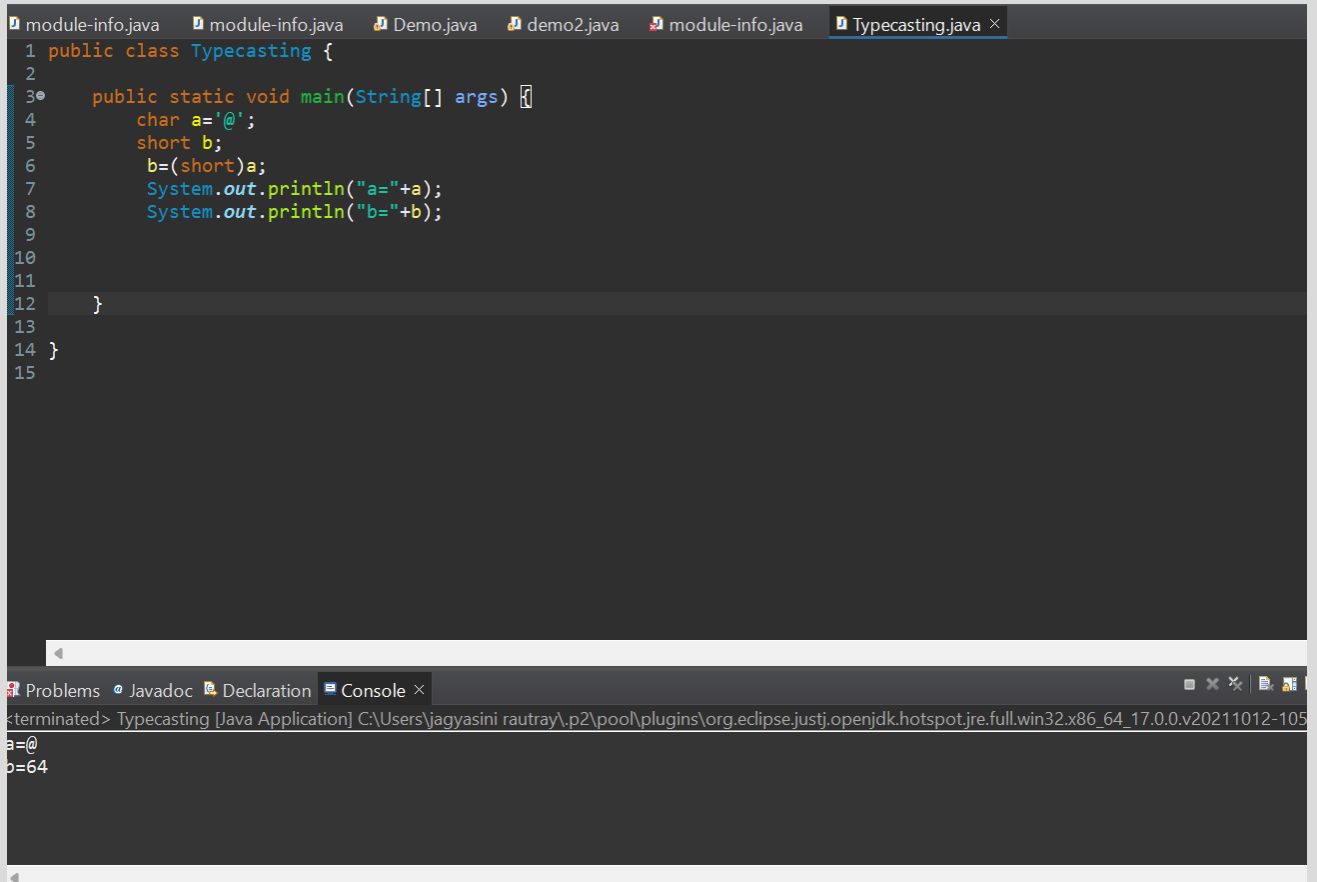
The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `typecasting.java` with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         char a='@';  
5         byte b;  
6         b=(byte)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

Below the editor, the Console view is open, showing the output of the program:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win3  
a=@  
b=64
```

Char to short :



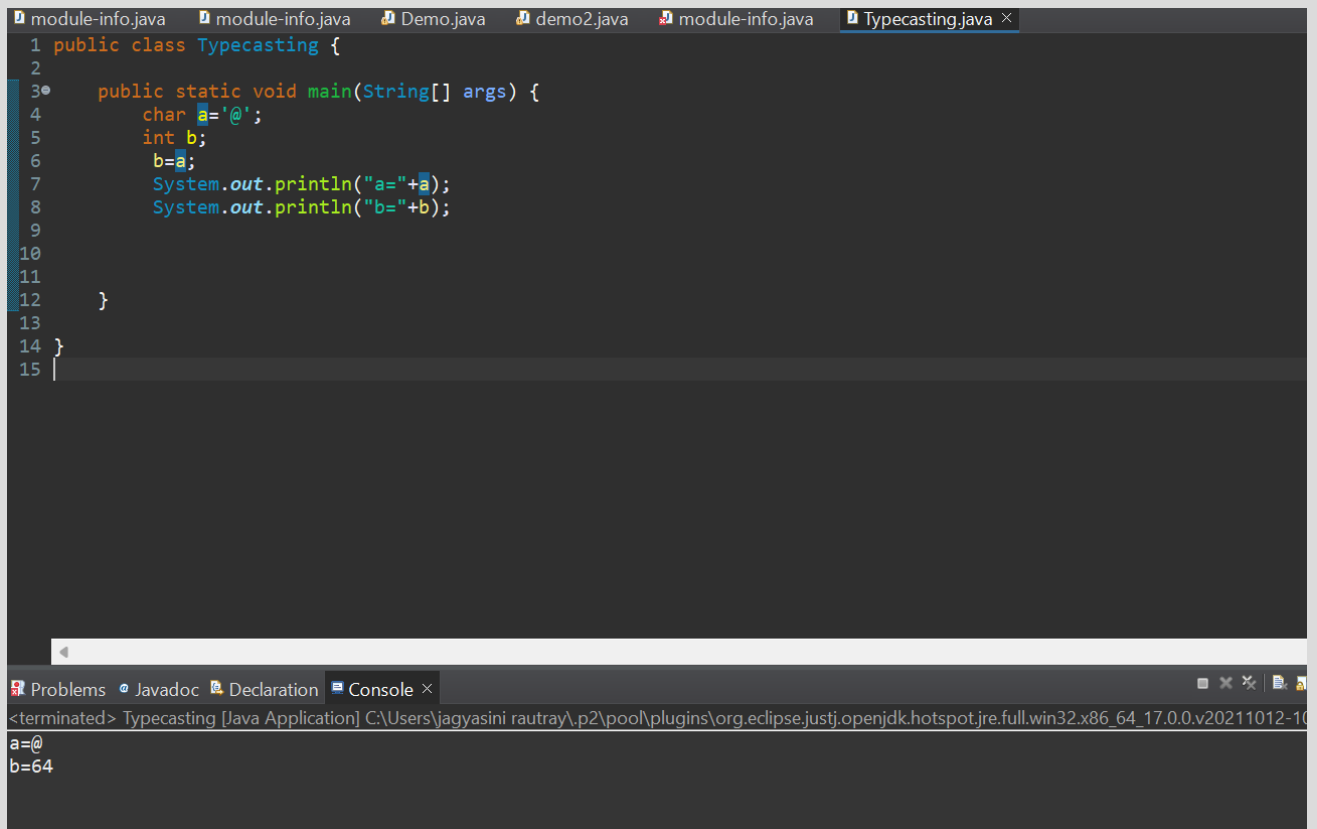
The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The editor displays a Java file named 'Typecasting.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         char a='@';  
5         short b;  
6         b=(short)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-105  
a=@  
b=64
```

Char to int :



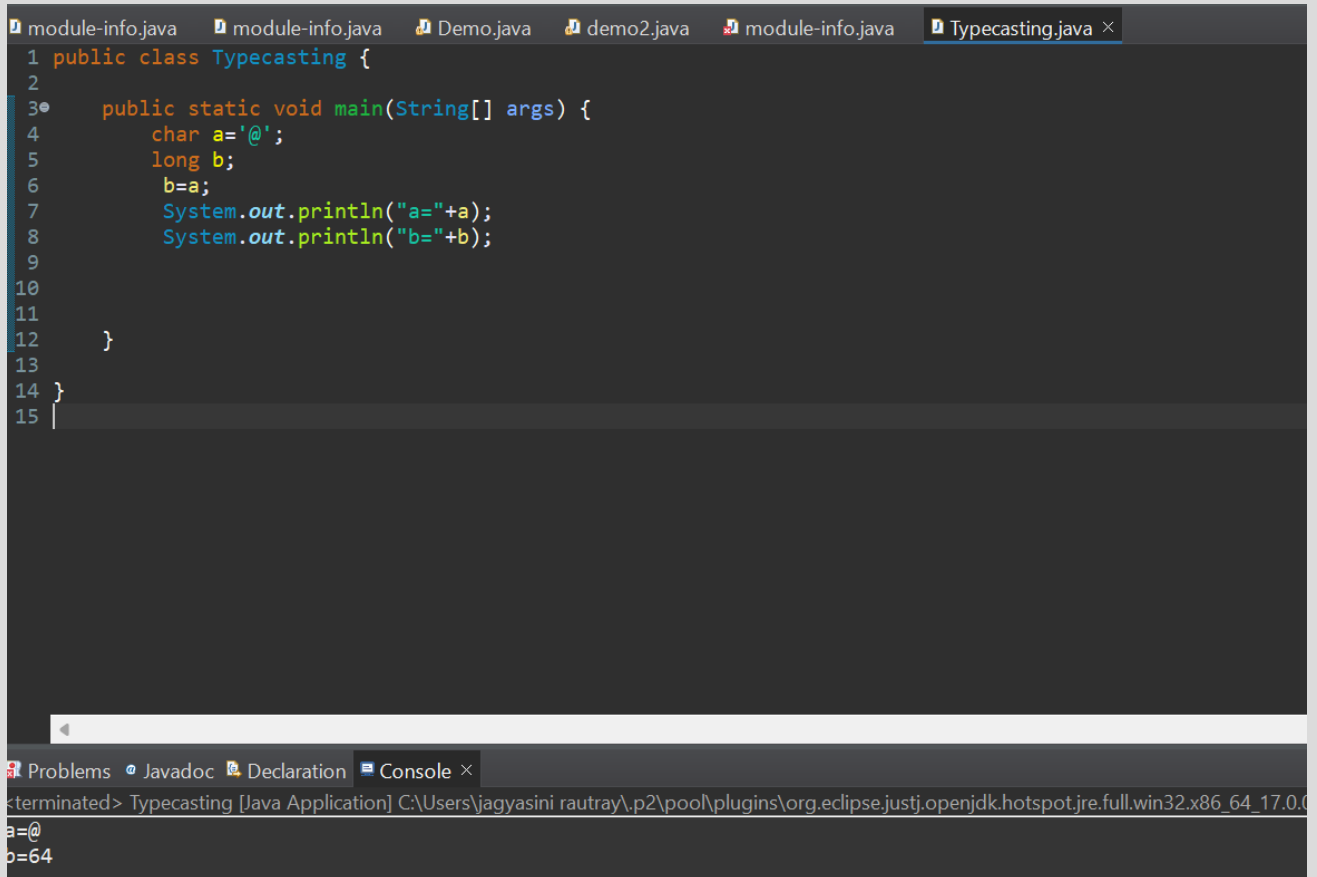
The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         char a='@';  
5         int b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13 }  
14  
15
```

Below the editor, the `Console` tab is active, showing the output of the program:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-10  
a=@  
b=64
```

Char to long :



The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The 'Typecasting.java' file is open, displaying the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         char a='@';  
5         long b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15 |
```

The console output at the bottom shows the execution results:

```
terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0  
a=@  
b=64
```


Char to float :



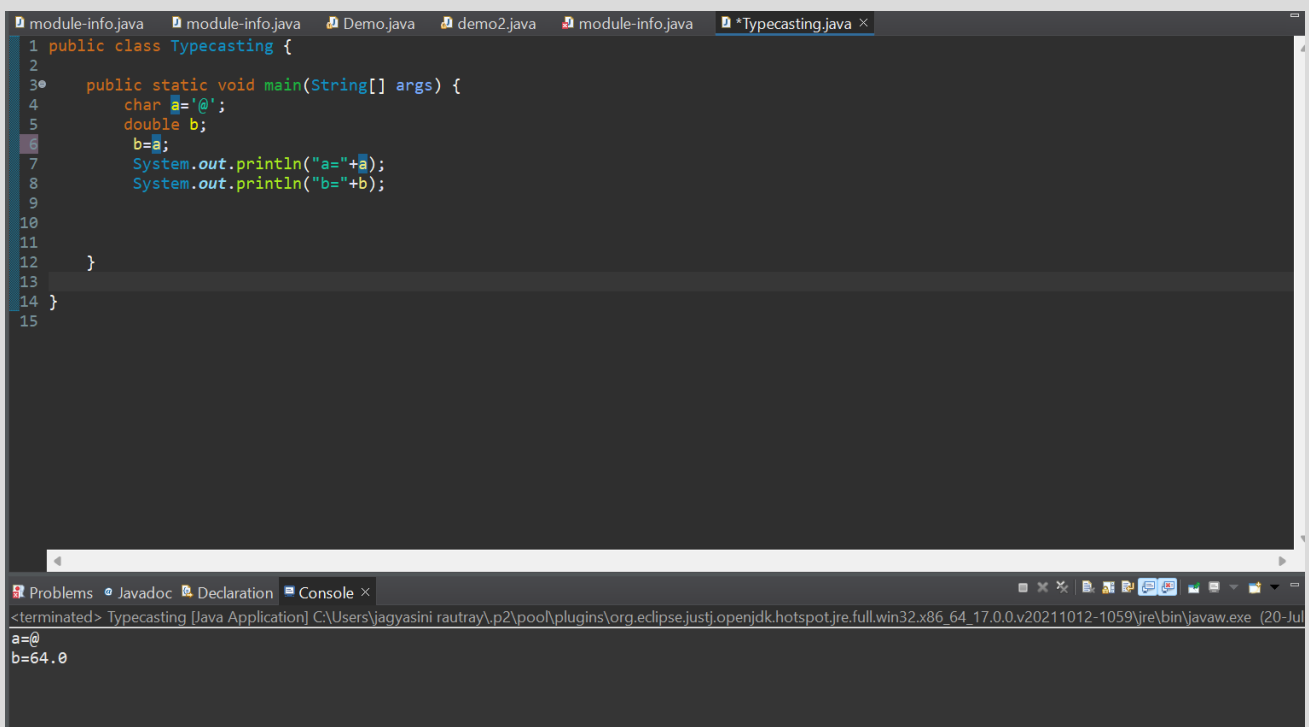
The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         char a='@';
5         float b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13 }
14
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\javaw.exe (20-Jul-2021 10:12:10)
a=@
b=64.0
```

Char to double :



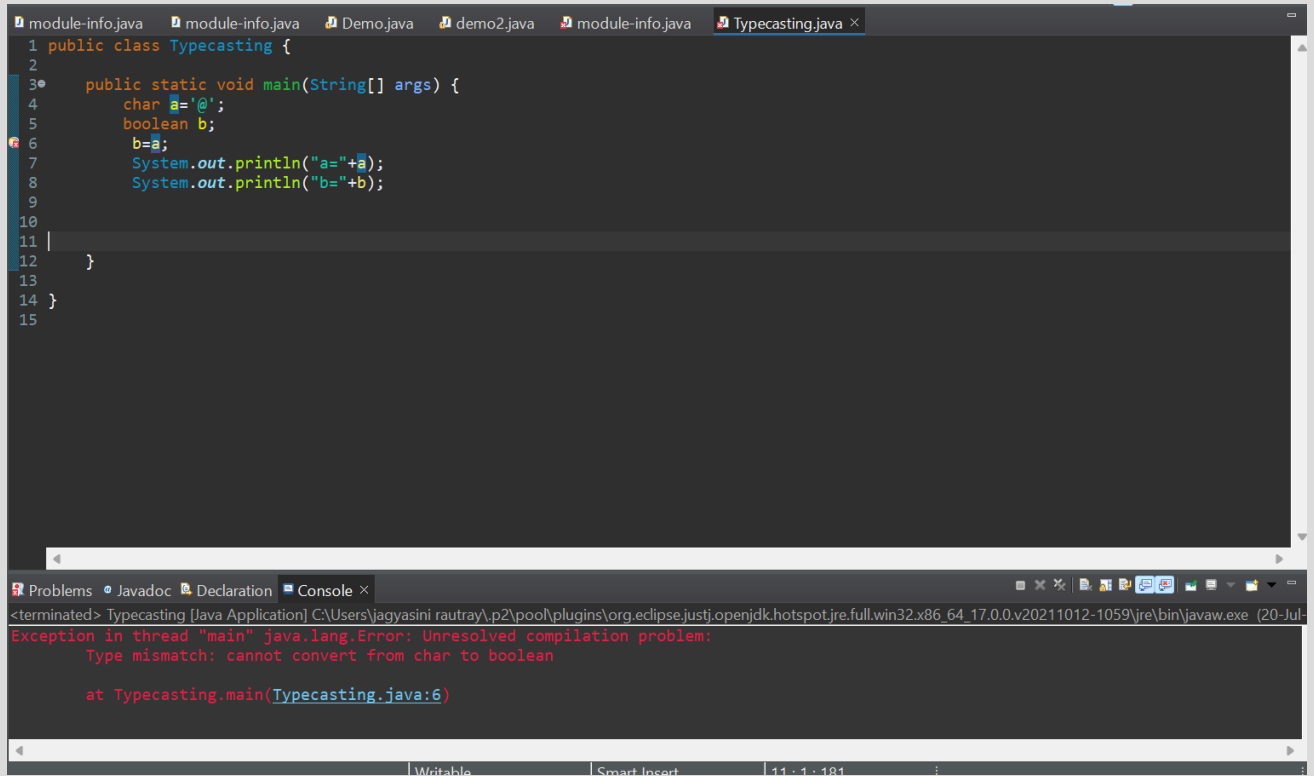
The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         char a='@';
5         double b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13 }
14
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\javaw.exe (20-Jul-2021 10:12:10)
a=@
b=64.0
```

Char to Boolean :



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         char a='@';
5         boolean b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10    }
11
12 }
13
14 }
15
```

Problems Javadoc Declaration Console x

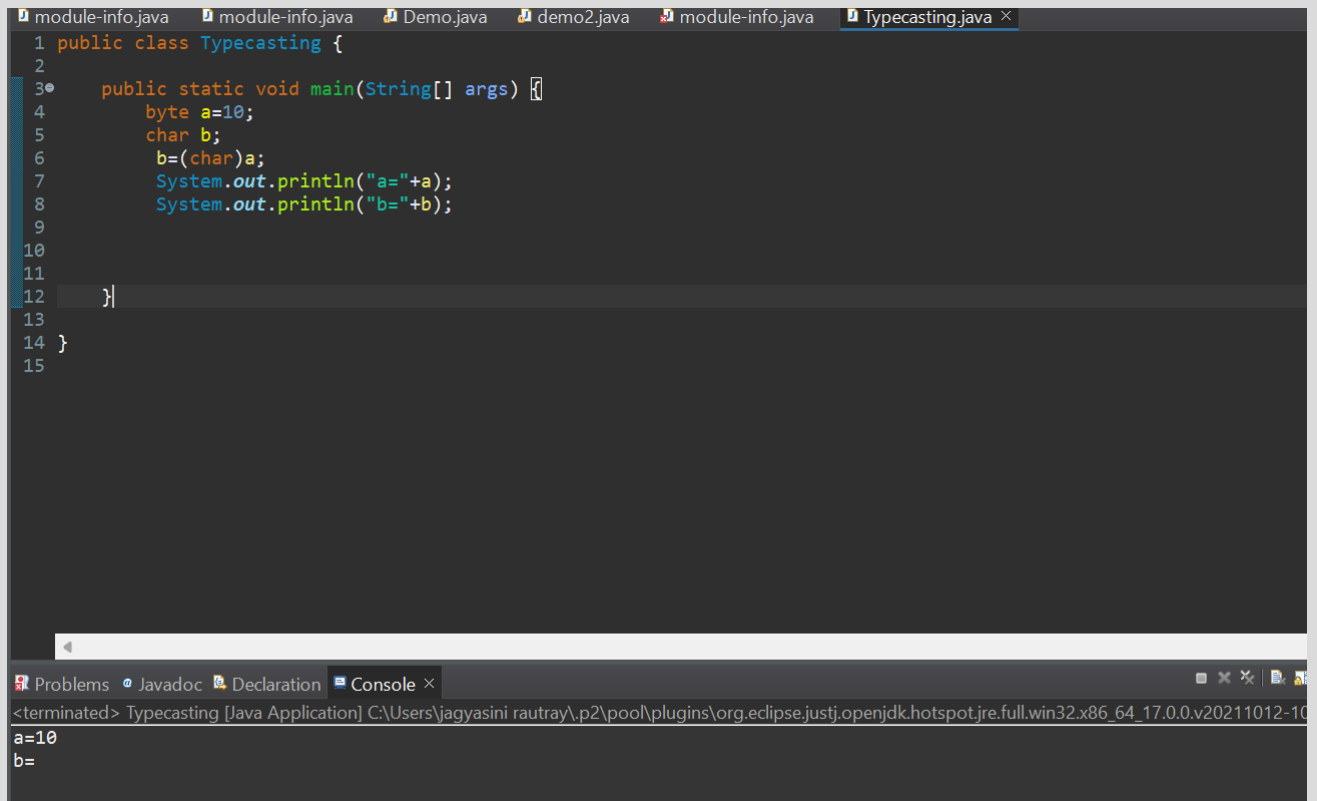
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\javaw.exe (20-Jul-2021 11:11:18)

Exception in thread "main" java.lang.Error: Unresolved compilation problem:
Type mismatch: cannot convert from char to boolean

at Typecasting.main(Typecasting.java:6)

//cannot convert

Byte to char:



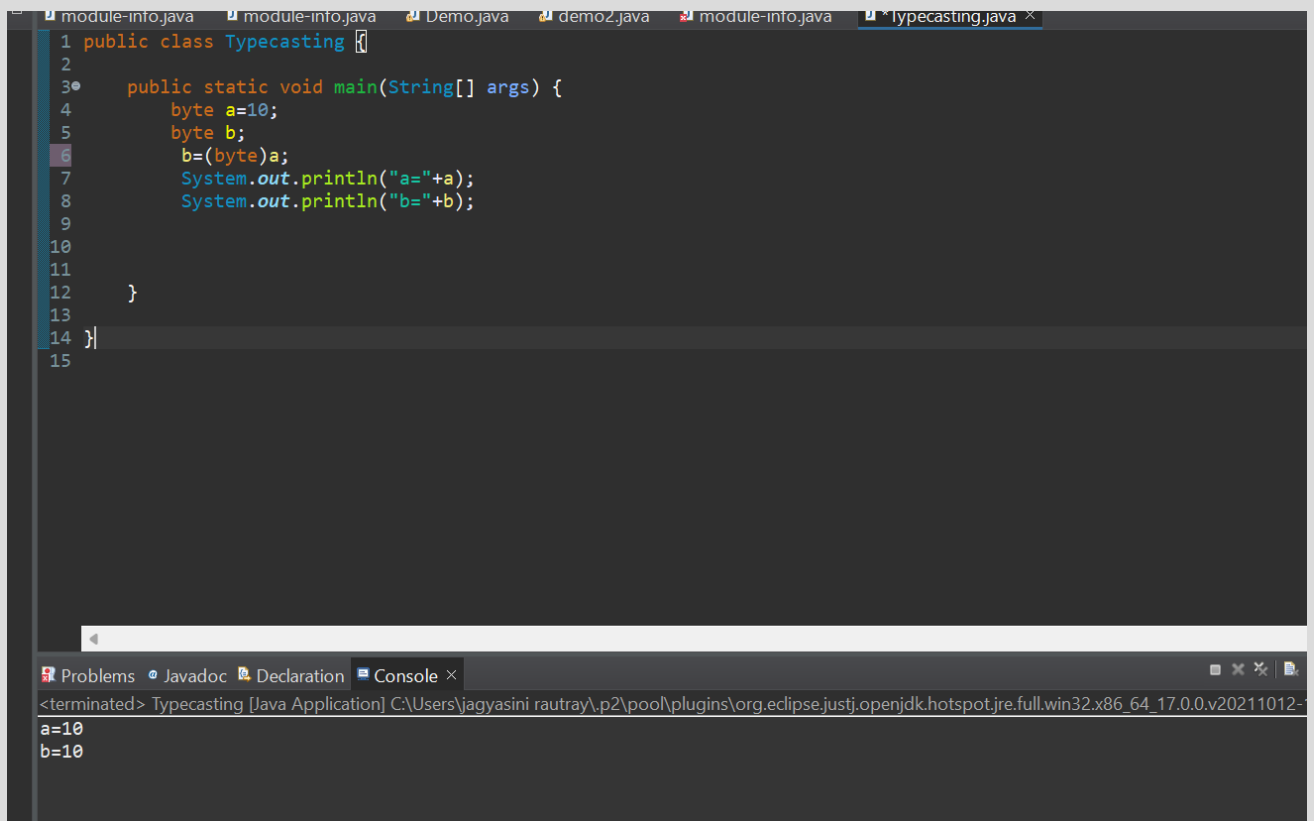
The screenshot shows the Eclipse IDE with a Java project. The editor displays the following code in `Typecasting.java`:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         byte a=10;  
5         char b;  
6         b=(char)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-10  
a=10  
b=
```

Byte to byte :



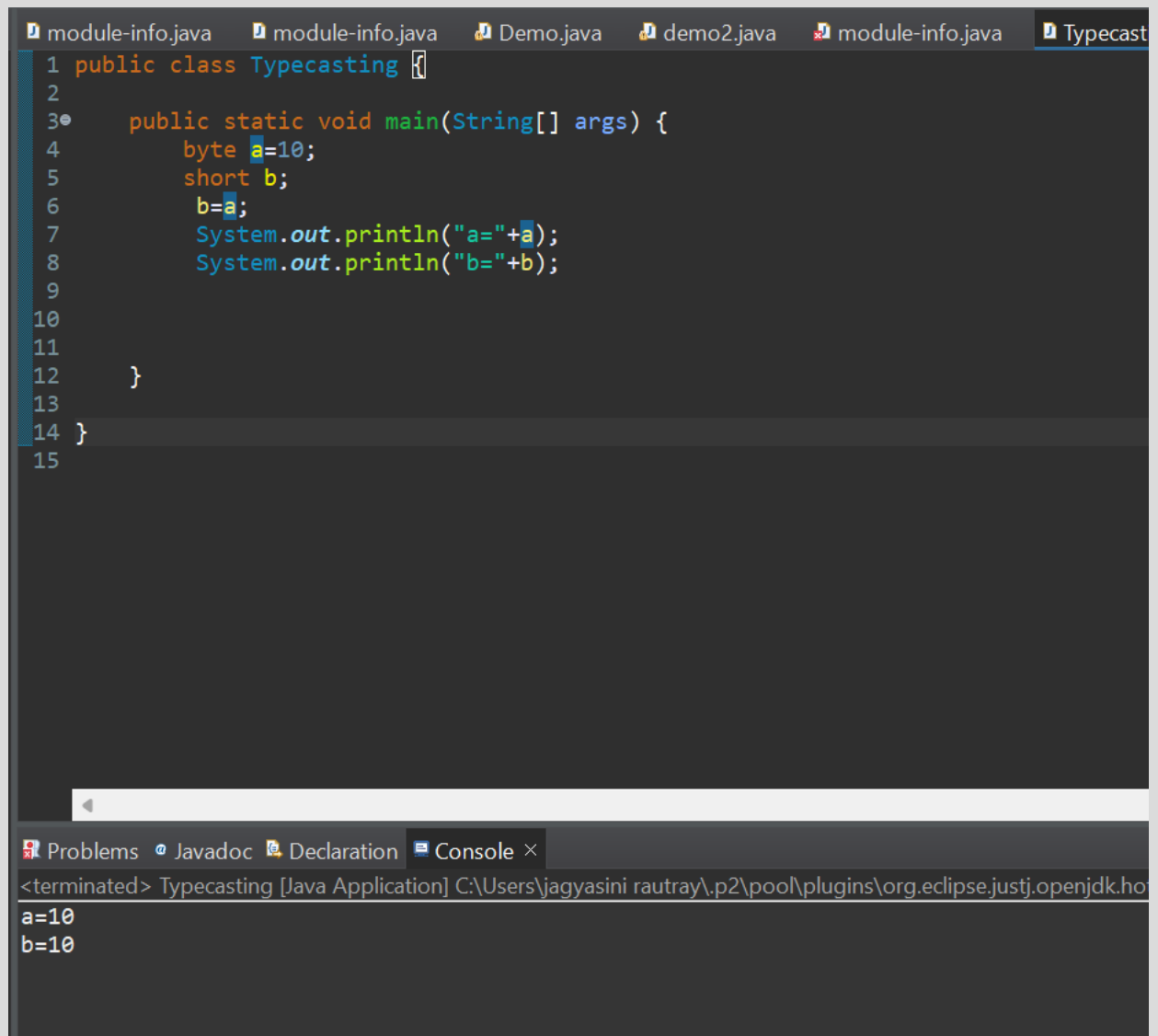
The screenshot shows the Eclipse IDE with a Java project. The editor displays the following code in `Typecasting.java`:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         byte a=10;  
5         byte b;  
6         b=(byte)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11     }  
12 }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-  
a=10  
b=10
```

Byte to short:



The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named 'Typecast.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         byte a=10;  
5         short b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The IDE's console window at the bottom shows the output of the program:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full\  
a=10  
b=10
```

Byte to int:

```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  Typecasting.java x
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         byte a=10;
5         int b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console x

<terminated> Typecasting [Java Application] C:\Users\jagyasini rastray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v2021101

a=10
b=10

Byte to long:

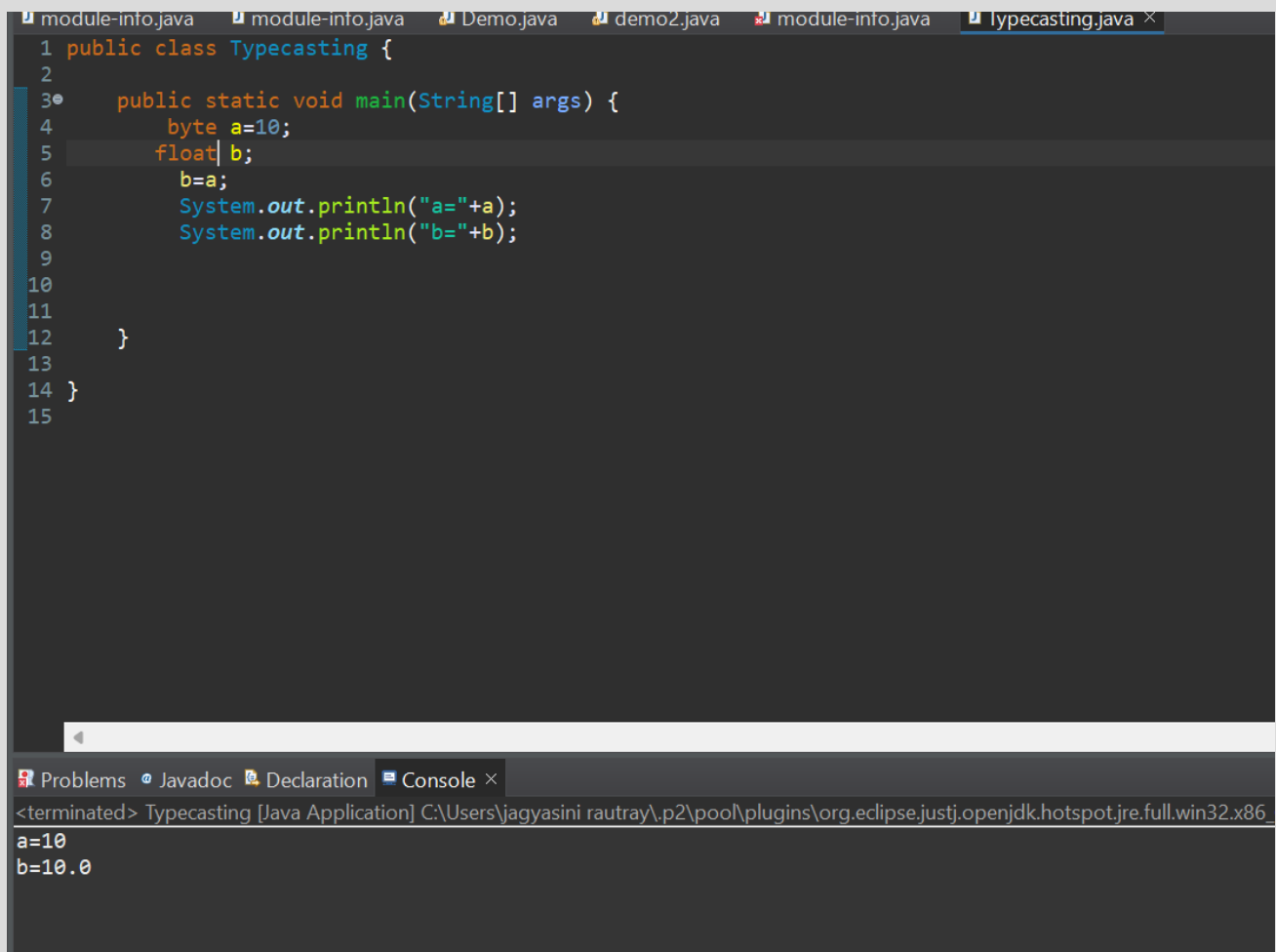
```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  Typecasting.java x
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         byte a=10;
5         long b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console x

<terminated> Typecasting [Java Application] C:\Users\jagyasini rastray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\javaw.exe [2

a=10
b=10

Byte to float:



The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The editor displays a Java file named 'Typecasting.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         byte a=10;  
5         float b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86  
a=10  
b=10.0
```

Byte to double:

```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  typecasting.java
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         byte a=10;
5         double b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre

a=10
b=10.0

Byte to boolean:

```
module-info.java module-info.java Demo.java demo2.java module-info.java Typecasting.java ×
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         byte a=10;
5         boolean b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v202110
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
    Type mismatch: cannot convert from byte to boolean

    at Typecasting.main(Typecasting.java:6)
```

//cannot convert

Short to char:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         short a=10;  
5         char b;  
6         b=(char)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15 |
```

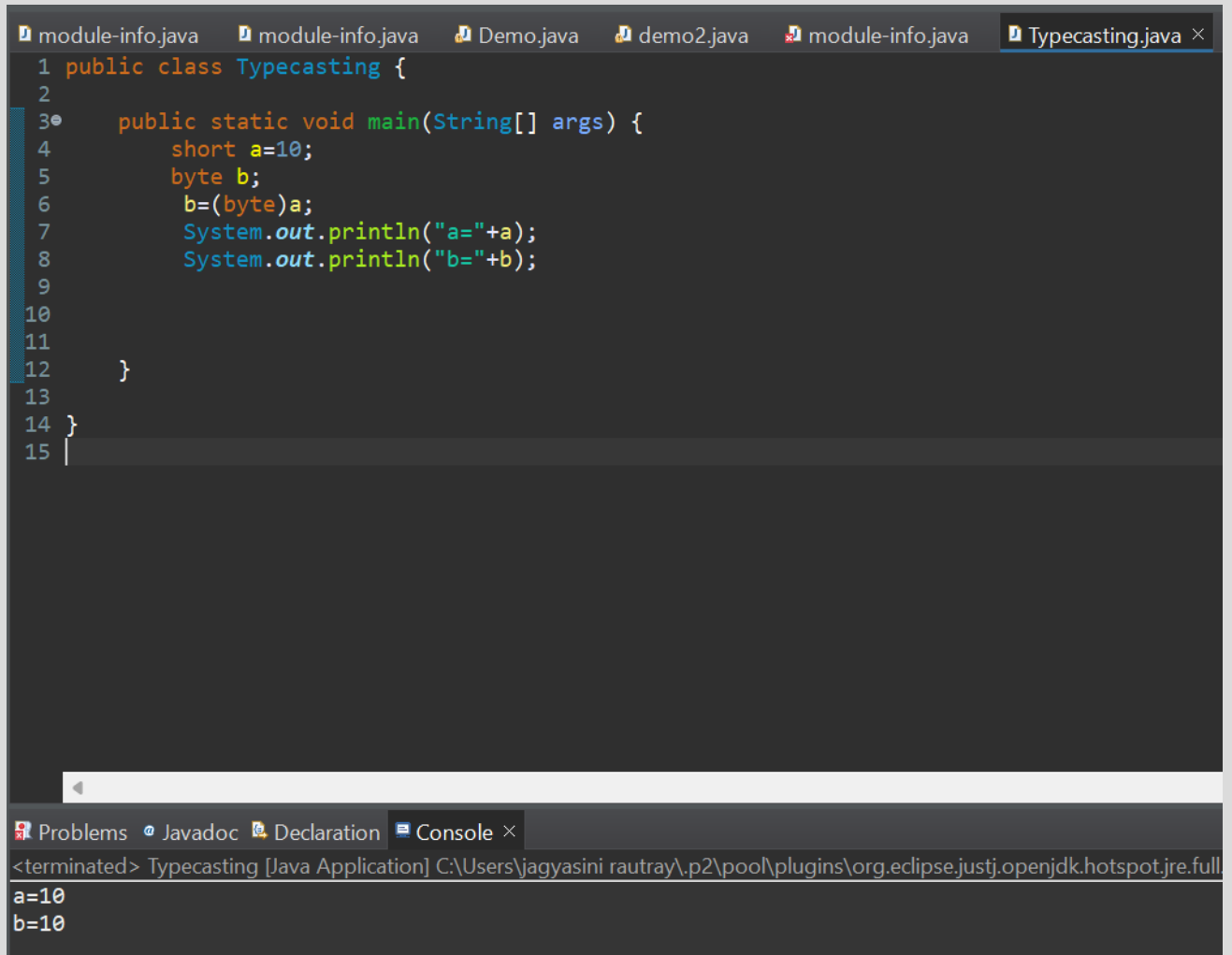
Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64-

a=10

b=

Short to byte:



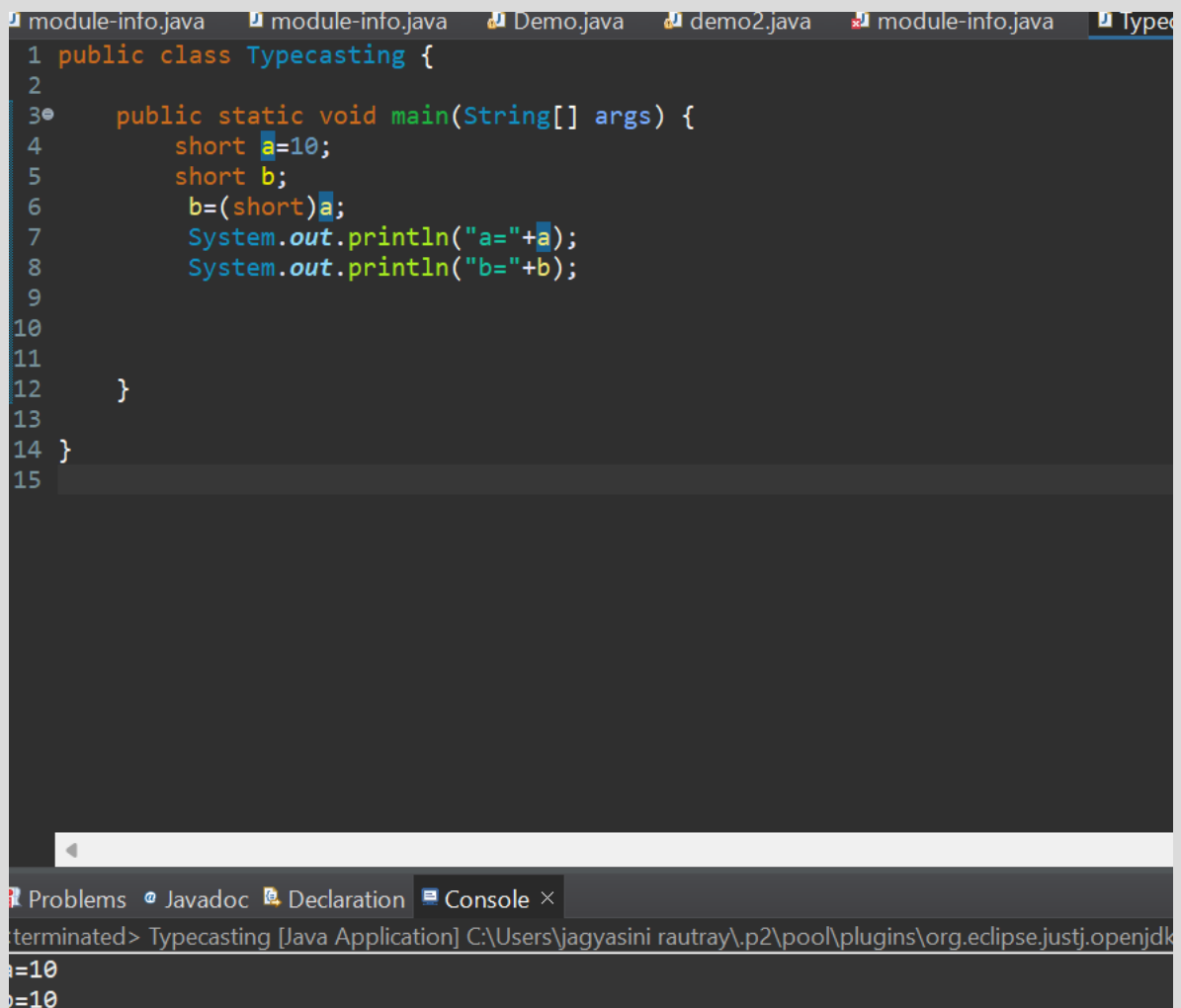
```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  Typecasting.java ×
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         short a=10;
5         byte b;
6         b=(byte)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15 |
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full

a=10
b=10

Short to short:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         short a=10;
5         short b;
6         b=(short)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk

a=10
b=10

Short to int:

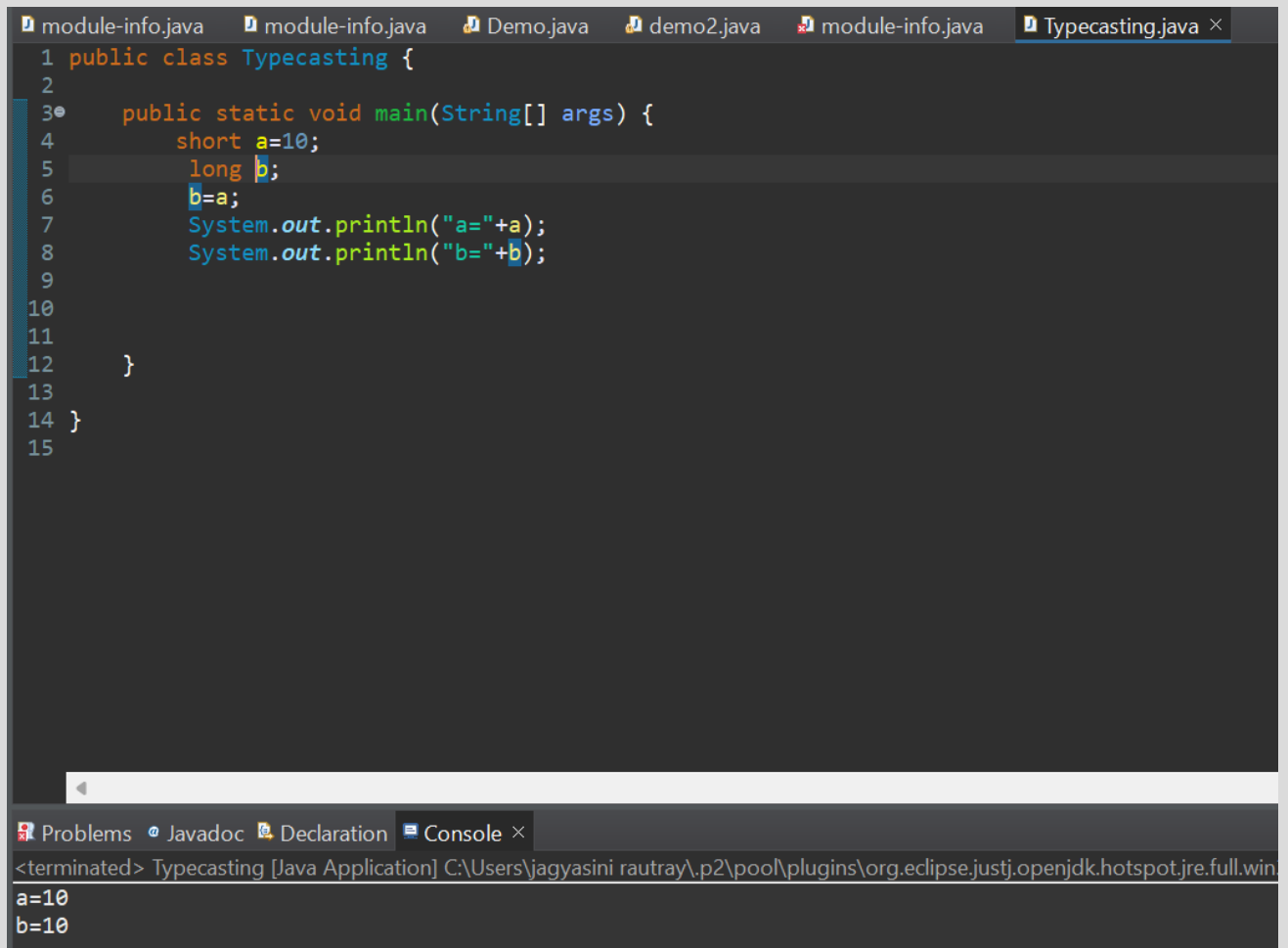
```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  *Typecasting.java ×
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         short a=10;
5         int b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full

a=10
b=10

Short to long:



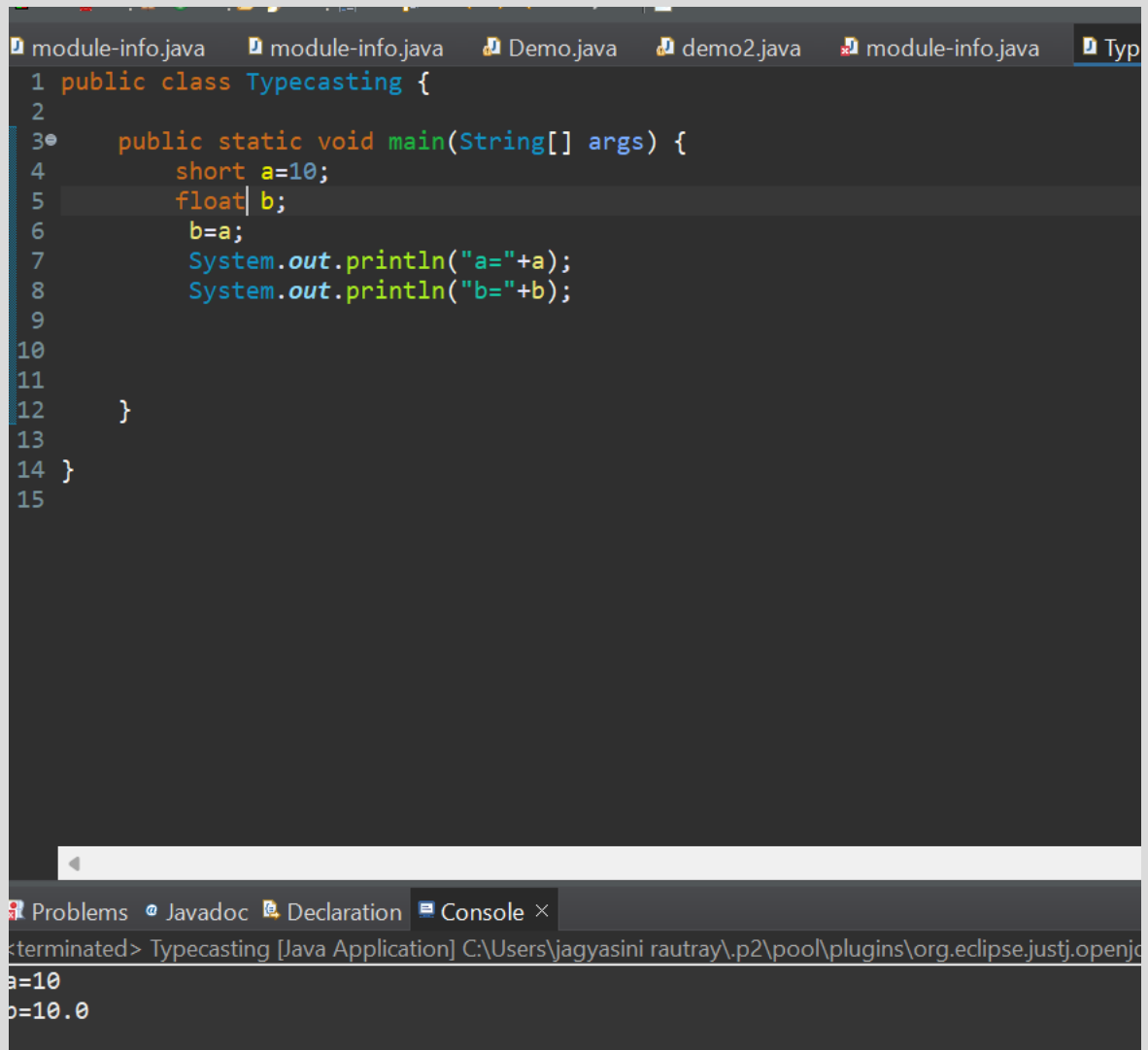
The screenshot shows the Eclipse IDE with a project named 'Typecasting'. The main editor displays the following Java code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         short a=10;  
5         long b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The bottom of the IDE shows the 'Console' tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win  
a=10  
b=10
```

Short to float:



```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         short a=10;  
5         float b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The screenshot shows the Eclipse IDE with a Java project. The editor displays a class named `Typecasting` with a `main` method. The code declares a `short` variable `a` with the value 10, and a `float` variable `b`. It then assigns the value of `a` to `b` and prints both values. The console output at the bottom shows the results of the program execution.

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.openjdk
a=10
b=10.0

Short to double:

```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  Typecasting
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         short a=10;
5         double b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotsp
a=10
b=10.0

Short to Boolean:

```
module-info.java  module-info.java  Demo.java  demo2.java  module
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         short a=10;
5         boolean b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

```
terminated> Typecasting [Java Application] C:\Users\jagyasini rautr...
Exception in thread "main" java.lang.Error: Unresolved compilation
Type mismatch: cannot convert from short to boolean

at Typecasting.main(Typecasting.java:6)
```

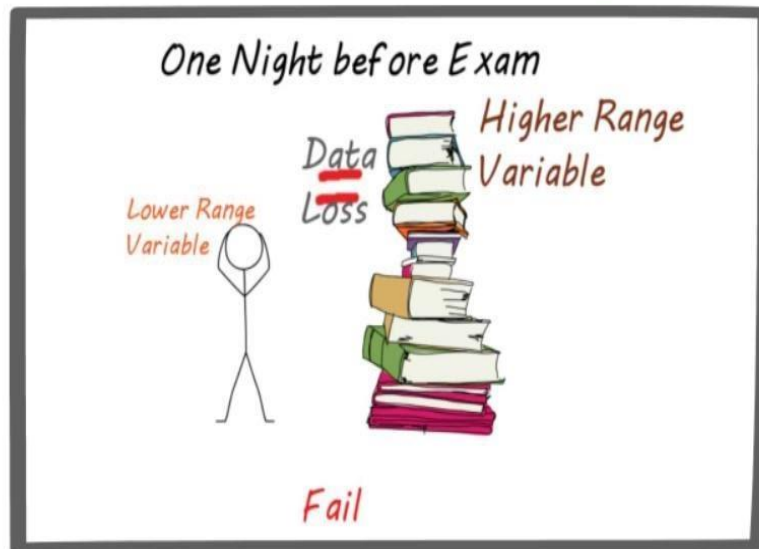
Writable | Sma

//cannot convert

JAVA



TYPE CASTING



IN JAVA

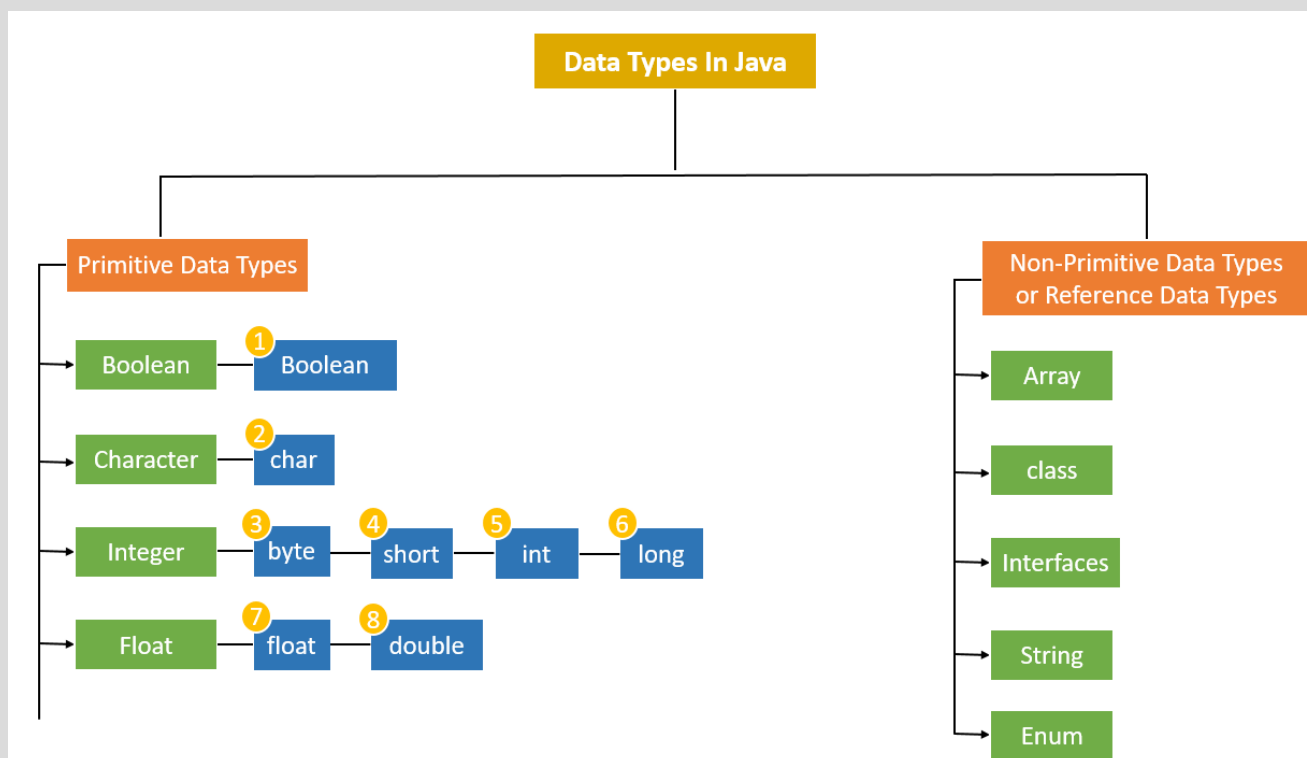


TYPECASTING

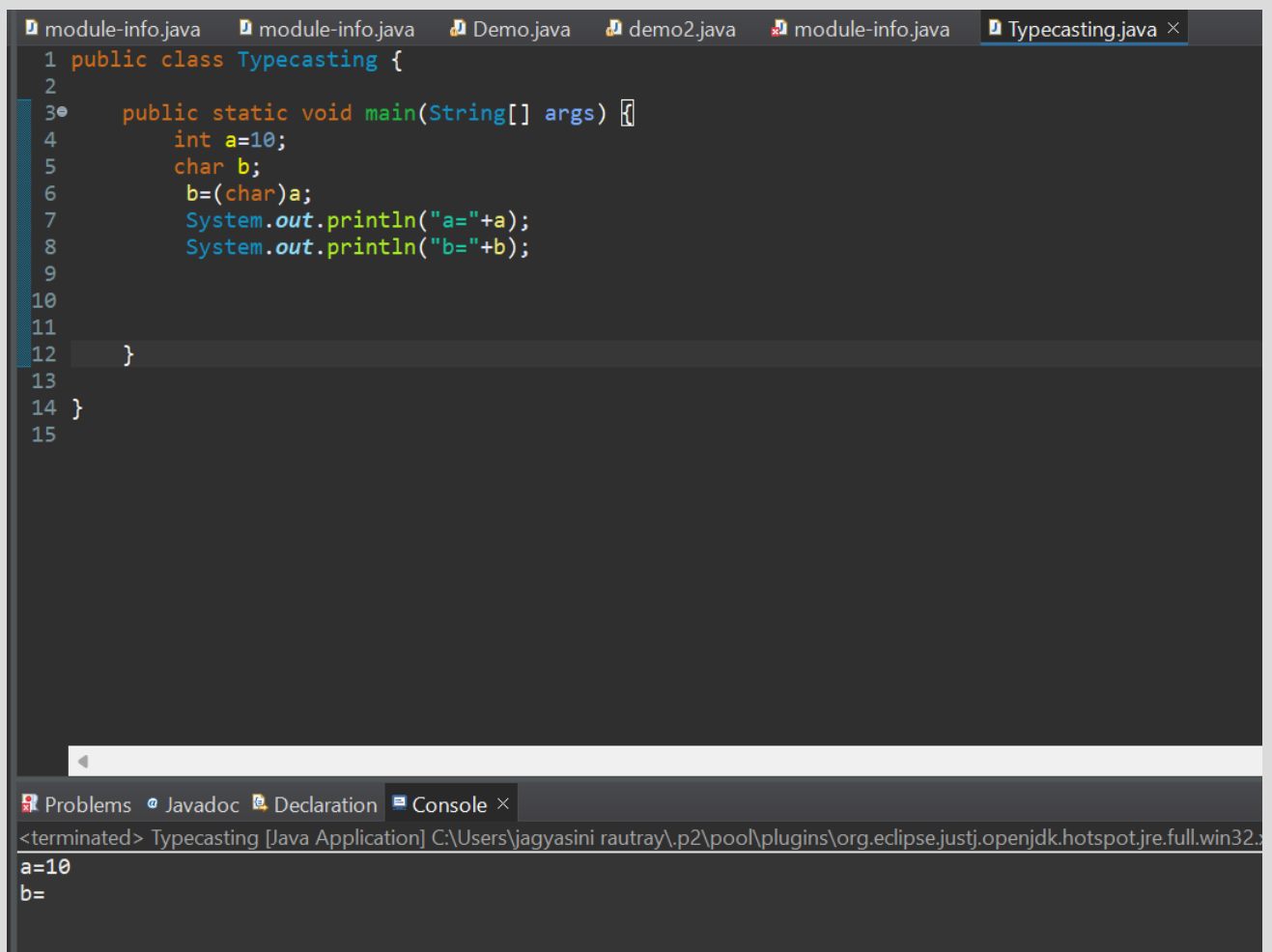
Story is all about these cup and saucer, what it is about? Will conclude soon....



Starting from these cute data types sadly they are not



Int to char:



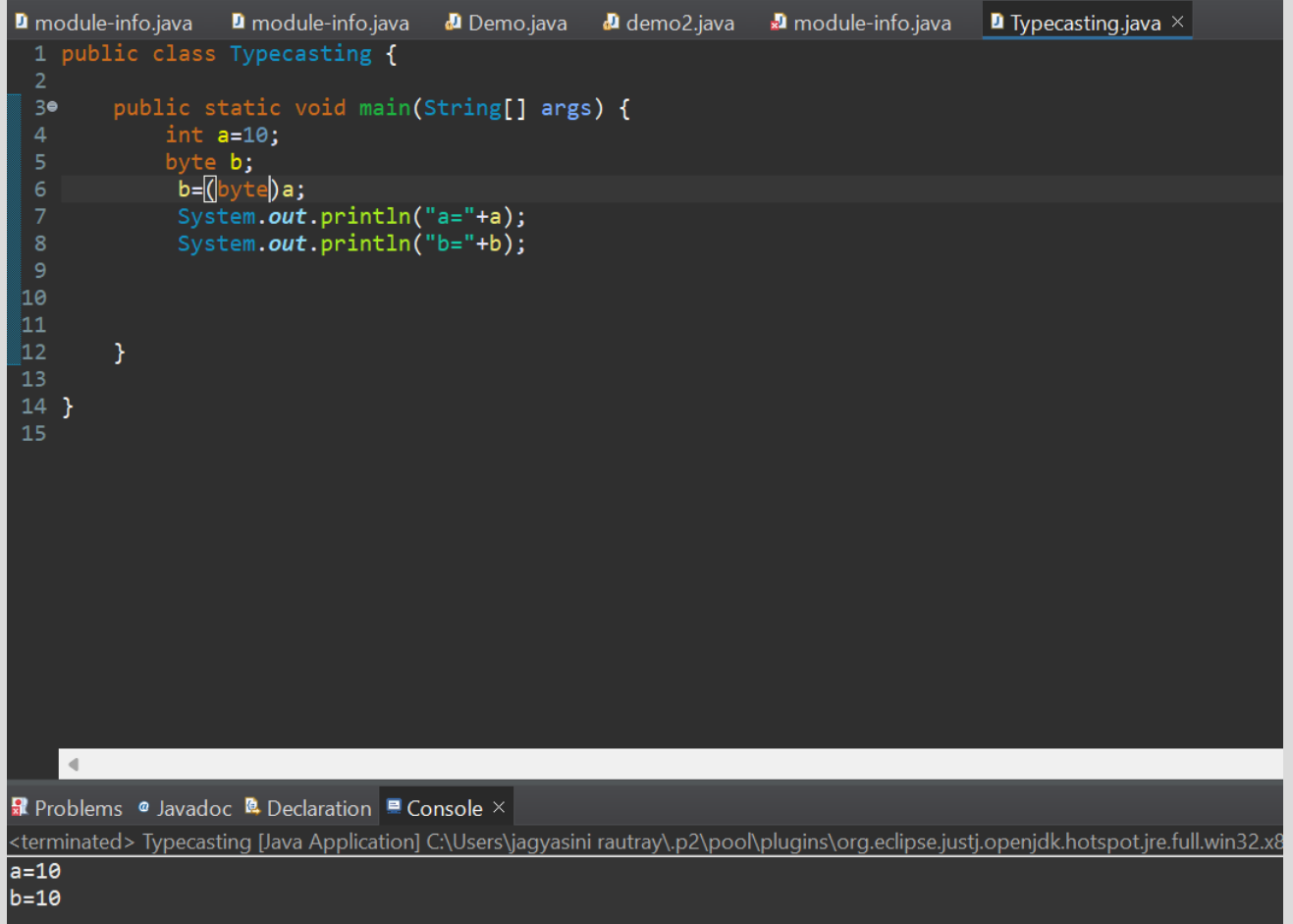
The screenshot displays the Eclipse IDE interface. The top toolbar shows several open files: 'module-info.java', 'Demo.java', 'demo2.java', and 'Typecasting.java'. The 'Typecasting.java' file is the active editor, showing the following Java code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         int a=10;  
5         char b;  
6         b=(char)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

Below the editor, the 'Console' tab is selected, showing the output of the program:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jdk\bin\java.exe  
a=10  
b=
```

Int to byte:



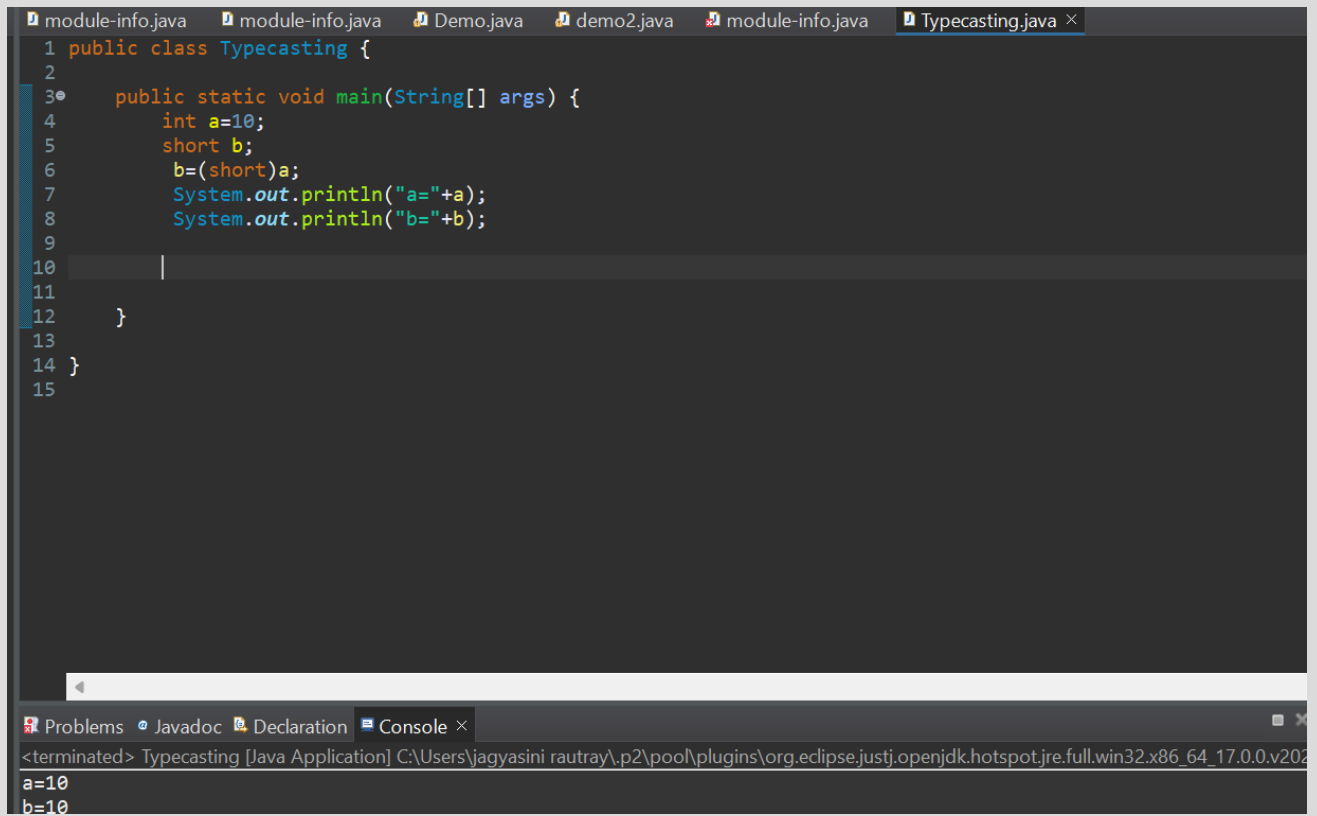
The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The editor displays a Java file named 'Typecasting.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         int a=10;  
5         byte b;  
6         b=(byte)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jdk\bin\java.exe  
a=10  
b=10
```

Int to short:



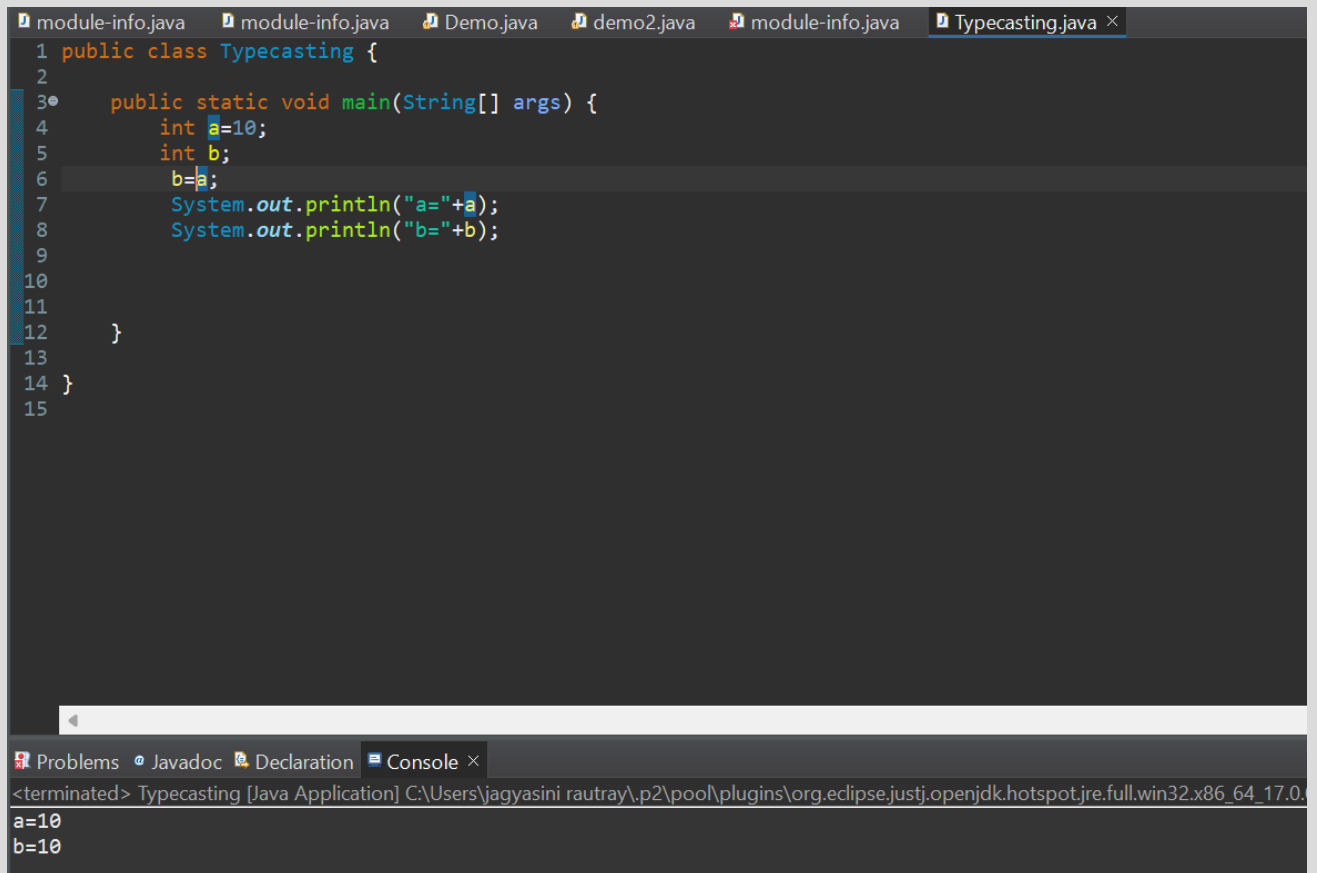
The screenshot shows the Eclipse IDE with a project named 'Typecasting'. The main editor displays the file 'Typecasting.java' with the following code:

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         int a=10;
5         short b;
6         b=(short)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13 }
14
15
```

The bottom of the IDE shows the 'Console' view with the output of the program:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20230419\jre\bin\java.exe
a=10
b=10
```

Int to int:



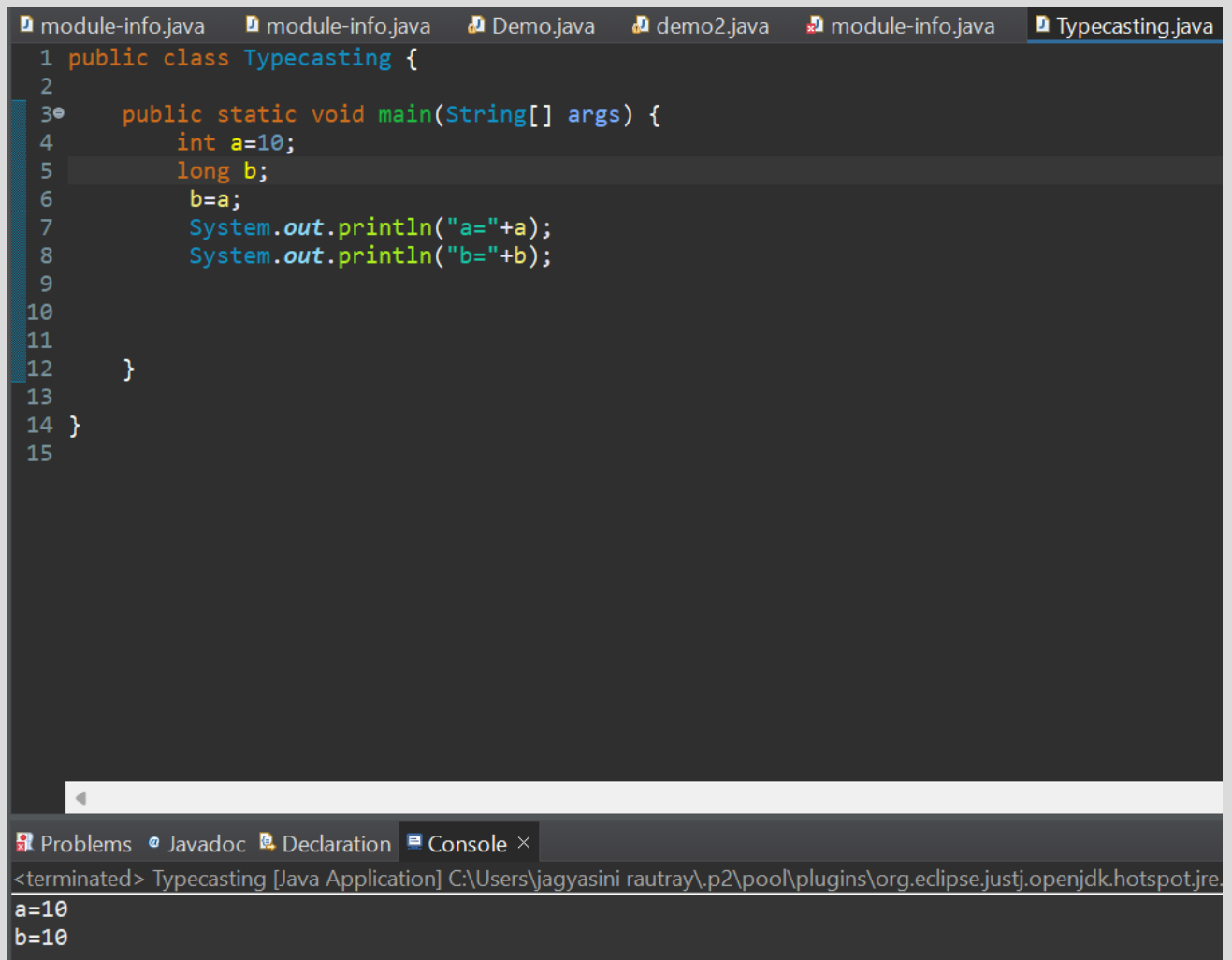
The screenshot shows the Eclipse IDE with a project named 'Typecasting'. The main editor displays the following Java code:

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         int a=10;
5         int b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13 }
14 }
15 }
```

The bottom of the IDE shows the 'Console' tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.
a=10
b=10
```

Int to long:



The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The main editor displays a Java file named 'Typecasting.java'. The code defines a public class 'Typecasting' with a static method 'main'. Inside 'main', an integer variable 'a' is initialized to 10, and a long variable 'b' is declared. 'b' is then assigned the value of 'a'. Finally, 'a' and 'b' are printed to the console using 'System.out.println'. The bottom of the IDE shows the 'Console' tab with the output of the program: 'a=10' and 'b=10'.

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         int a=10;
5         long b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.
a=10
b=10

Int to float:



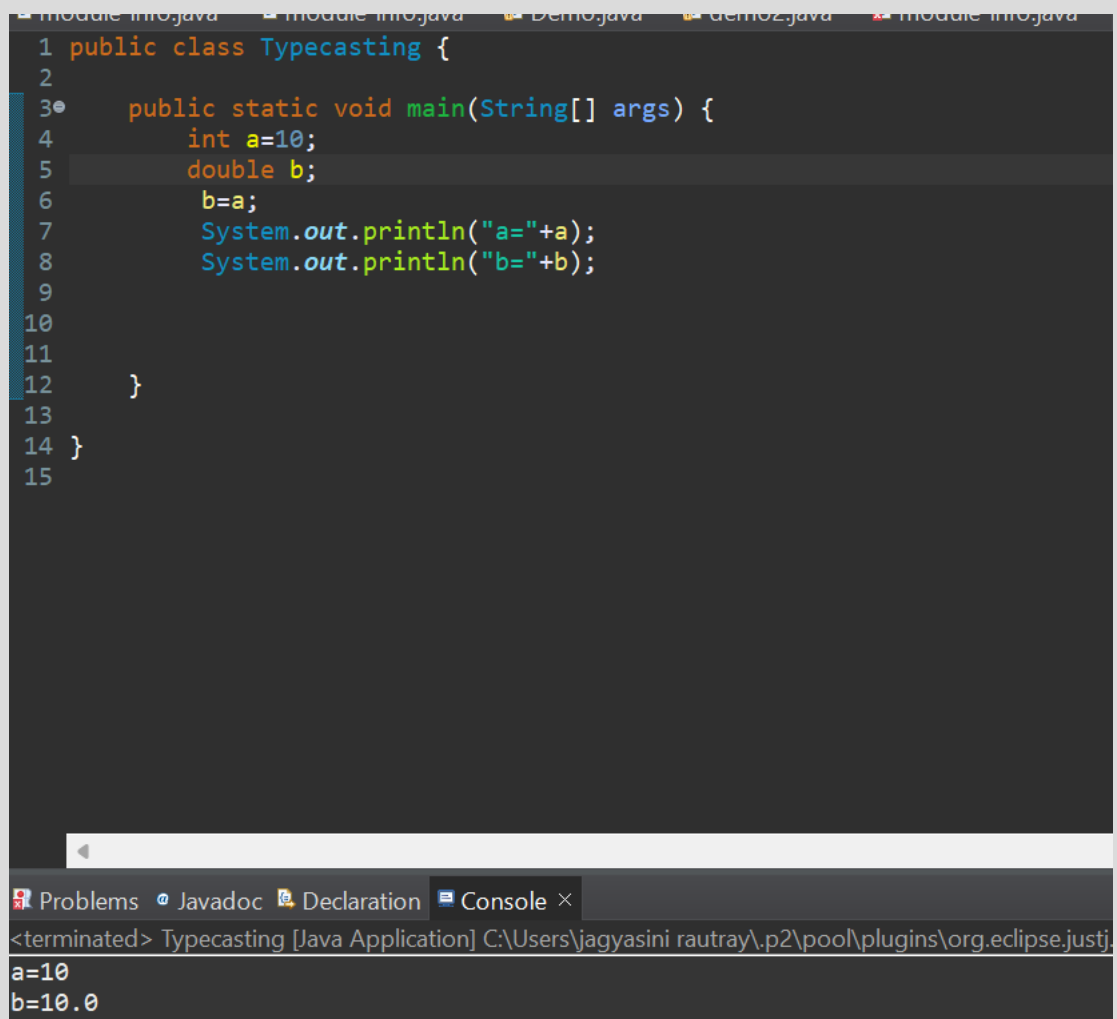
The image shows a screenshot of an IDE with a Java file named `Typecasting.java`. The code defines a public class `Typecasting` with a `main` method. Inside `main`, an integer `a` is initialized to 10, and a float `b` is declared. The value of `a` is assigned to `b`, and both values are printed to the console. The console output shows `a=10` and `b=10.0`, demonstrating that the integer value is automatically converted to a float when assigned to a float variable.

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         int a=10;
5         float b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\or
a=10
b=10.0

Int to double:



The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         int a=10;  
5         double b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13 }  
14  
15
```

The bottom of the IDE shows the **Console** tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj  
a=10  
b=10.0
```

Int to Boolean:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         int a=10;  
5         boolean b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.w
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
Type mismatch: cannot convert from int to boolean
at Typecasting.main(Typecasting.java:6)

//cannot convert

Long to char:



```
module-info.java  module-info.java  Demo.java  demo2.java
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         char b;
6         b=(char)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\p

a=10
b=

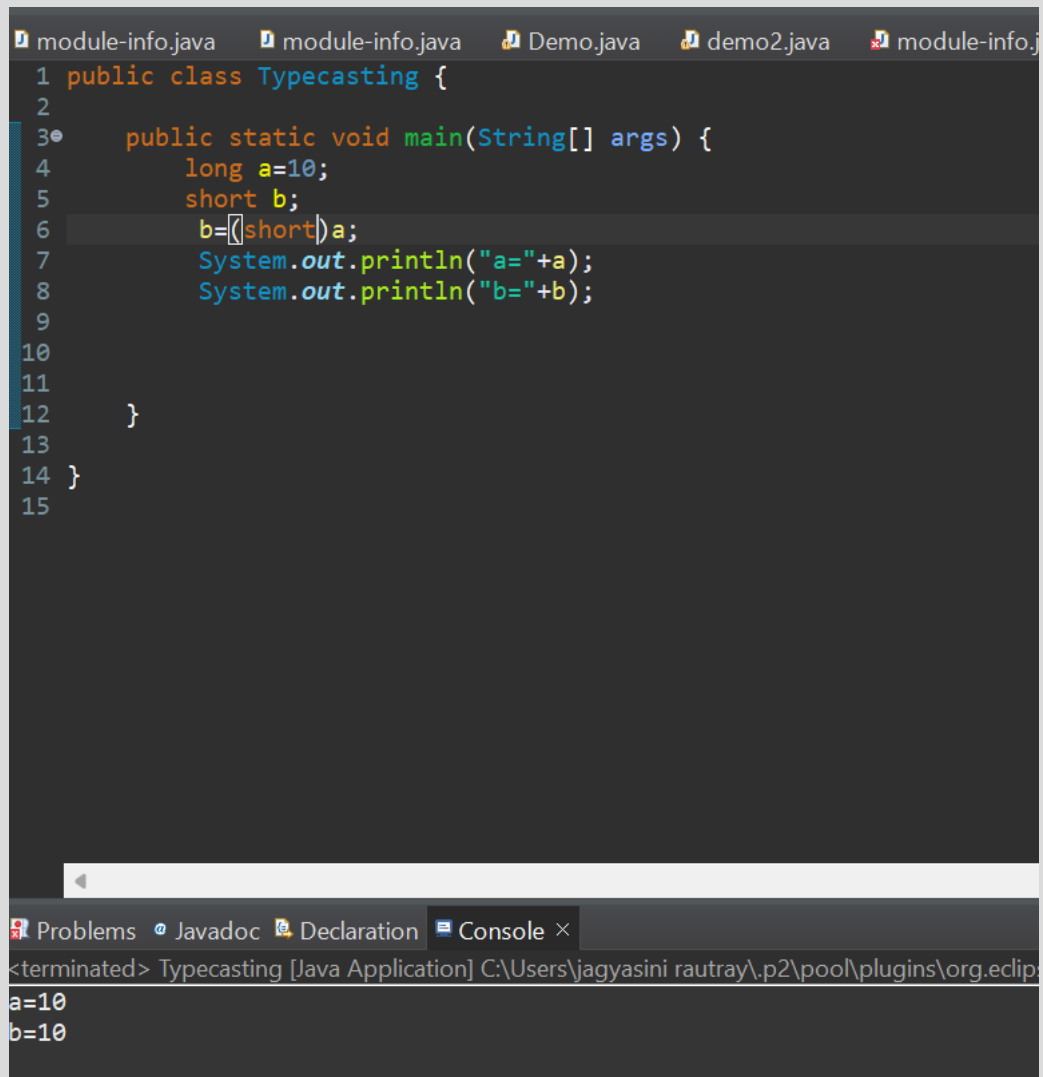
Long to byte:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         byte b;
6         b=(byte)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

The screenshot shows an IDE with a Java file named 'Typecasting.java'. The code defines a class 'Typecasting' with a 'main' method. Inside 'main', a 'long' variable 'a' is assigned the value 10, and a 'byte' variable 'b' is assigned the value of 'a' cast to a byte. The program prints the values of 'a' and 'b'. The console output at the bottom shows the execution results: 'a=10' and 'b=10'.

Long to short:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         short b;
6         b=(short)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

The screenshot shows the Eclipse IDE with a Java project. The editor displays a class named `Typecasting` with a `main` method. The code demonstrates casting a `long` variable `a` (value 10) to a `short` variable `b`. The console output shows the values of `a` and `b` after execution.

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse

a=10
b=10

Long to int:

```
module-info.java  module-info.java  Demo.java  demo2.java
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         int b;
6         b=(int)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool

a=10
b=10

Long to long:

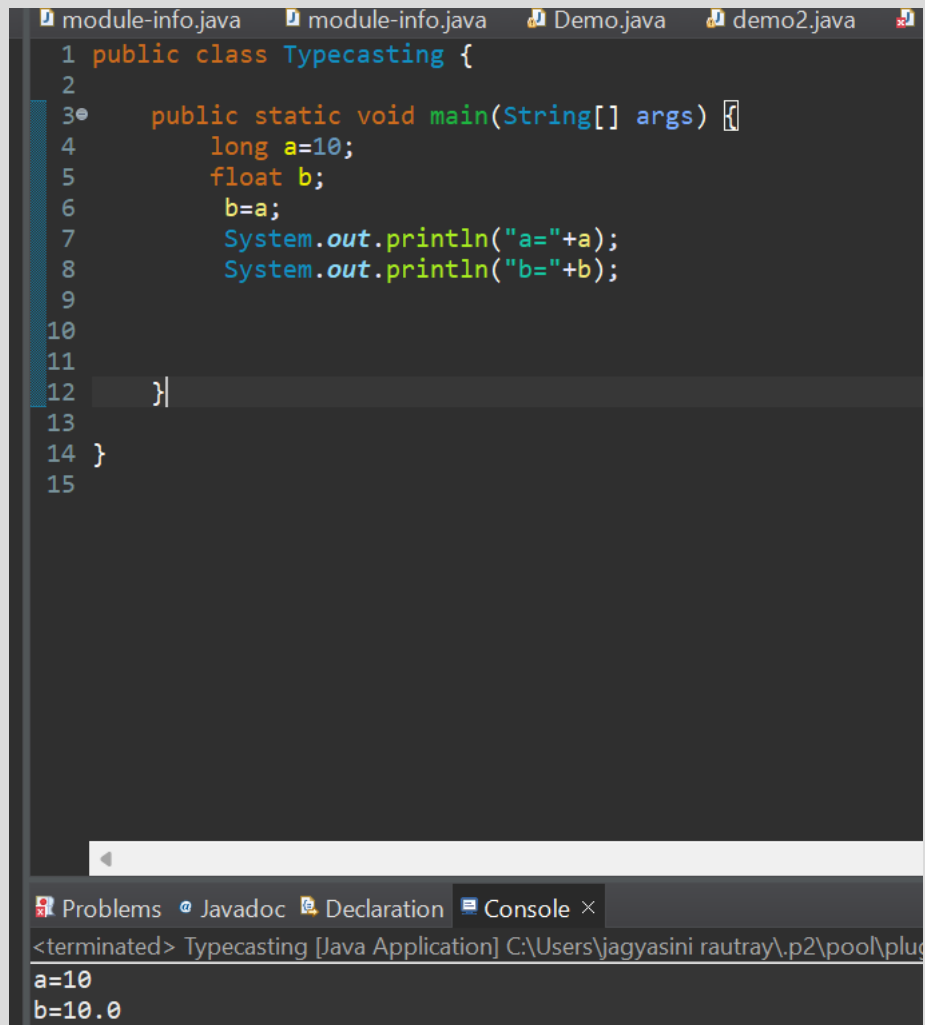
```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         long b;
6         b=(long)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.ec

a=10
b=10

Long to float:



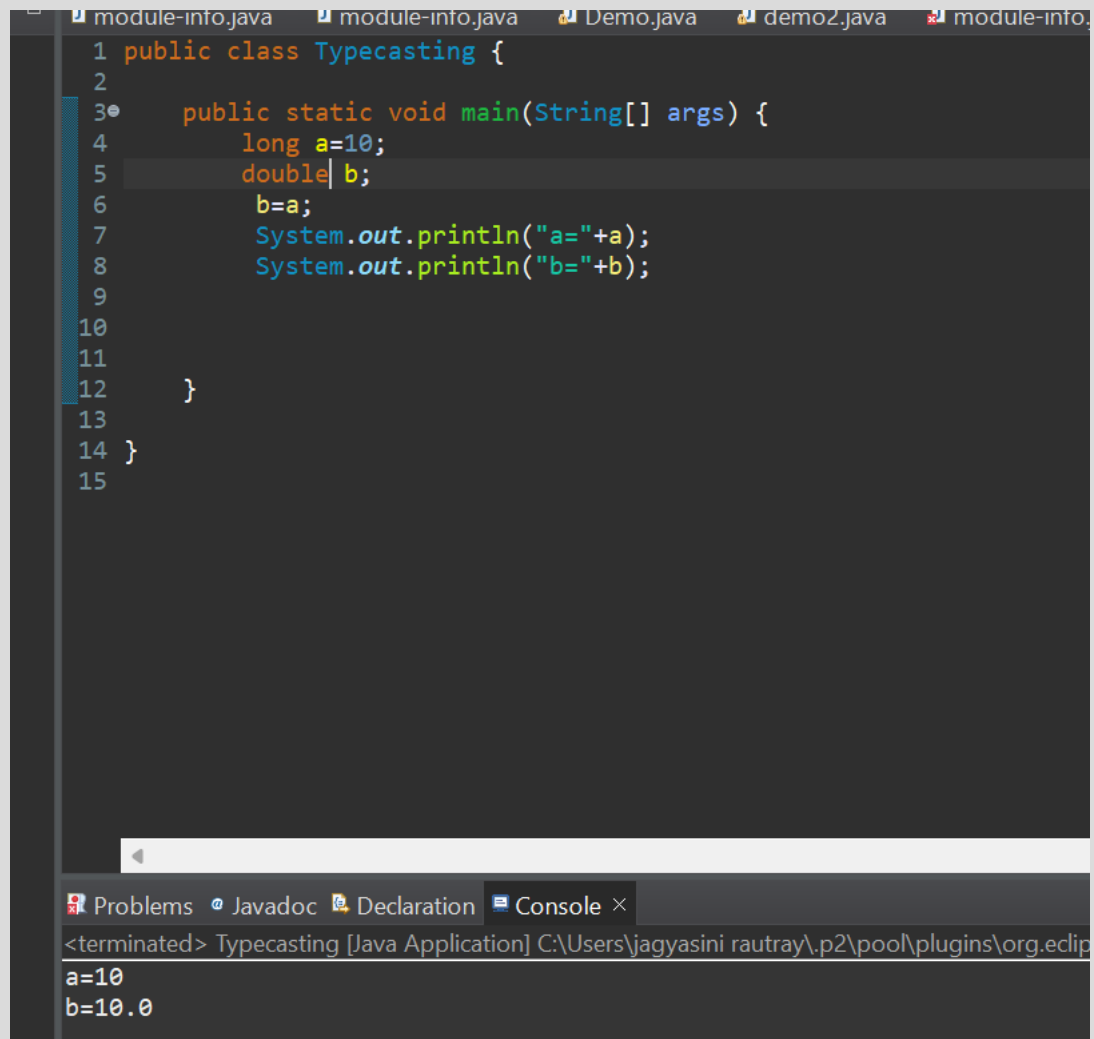
The screenshot shows an IDE with a Java file named `Typecasting.java`. The code defines a `public class Typecasting` with a `main` method. Inside `main`, a `long` variable `a` is assigned the value 10, and a `float` variable `b` is assigned the value of `a`. The program then prints the values of `a` and `b`. The console output shows `a=10` and `b=10.0`, demonstrating the automatic conversion of a `long` to a `float`.

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         float b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plug
a=10
b=10.0

Long to double:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         long a=10;
5         double b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

The screenshot shows the Eclipse IDE with a Java file named 'Typecasting.java'. The code defines a public class 'Typecasting' with a main method. Inside the main method, a long variable 'a' is assigned the value 10, and a double variable 'b' is declared. Then, 'b' is assigned the value of 'a'. Finally, two print statements are executed: 'System.out.println("a="+a);' and 'System.out.println("b="+b);'. The console output at the bottom shows 'a=10' and 'b=10.0', demonstrating that the long value is automatically converted to a double when assigned to a double variable.

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautrav\p2\pool\plugins\org.eclipse

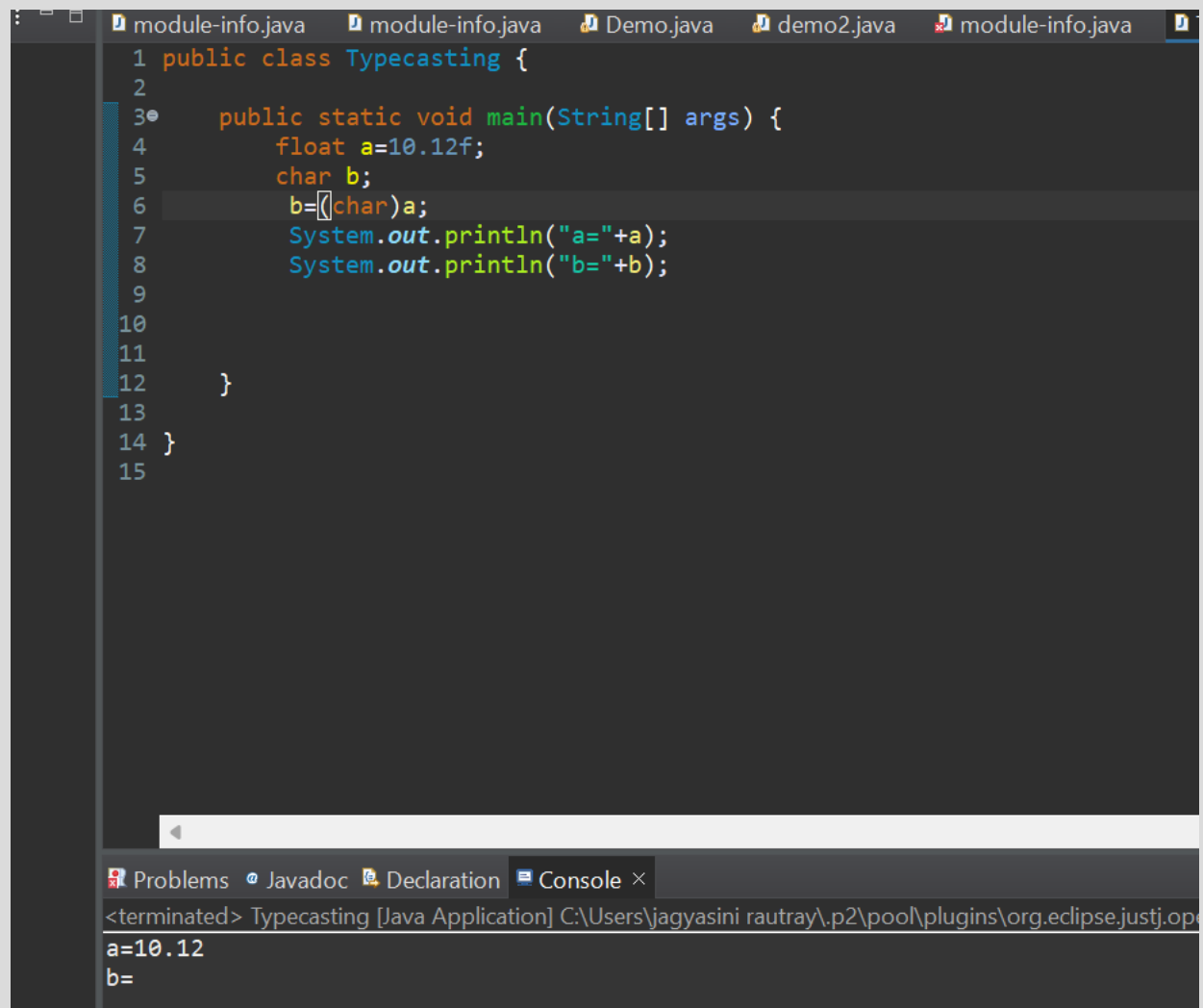
a=10
b=10.0

Long to Boolean:



```
module-info.java  module-info.java  Demo.java  demo2.java  module-  
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         long a=10;  
5         boolean b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15  
  
Problems  Javadoc  Declaration  Console ×  
<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org  
Exception in thread "main" java.lang.Error: Unresolved compilation  
Type mismatch: cannot convert from long to boolean  
  
at Typecasting.main(Typecasting.java:6)
```

Float to char:



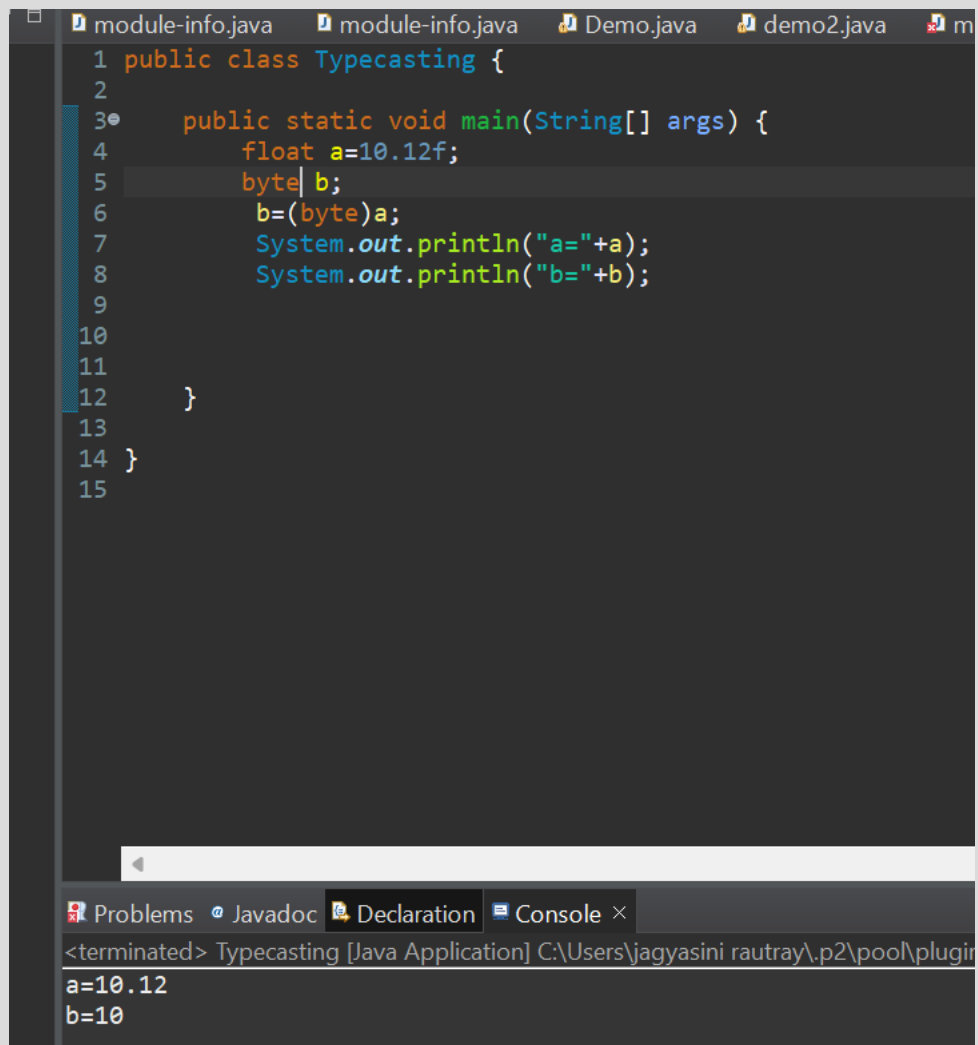
The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         float a=10.12f;  
5         char b;  
6         b=(char)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The console output at the bottom shows the execution results:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugins\org.eclipse.justj.op  
a=10.12  
b=
```

Float to byte:



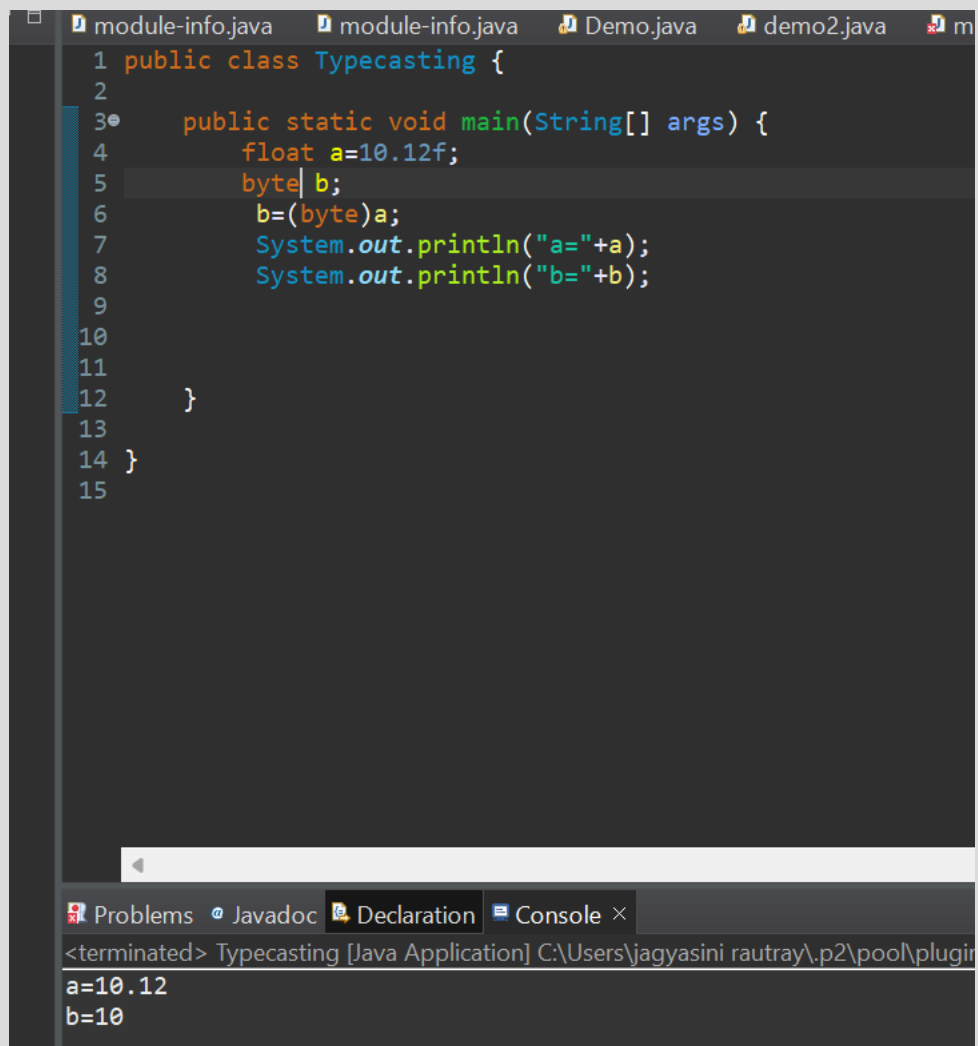
```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         byte b;
6         b=(byte)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugin

a=10.12
b=10

Float to short:



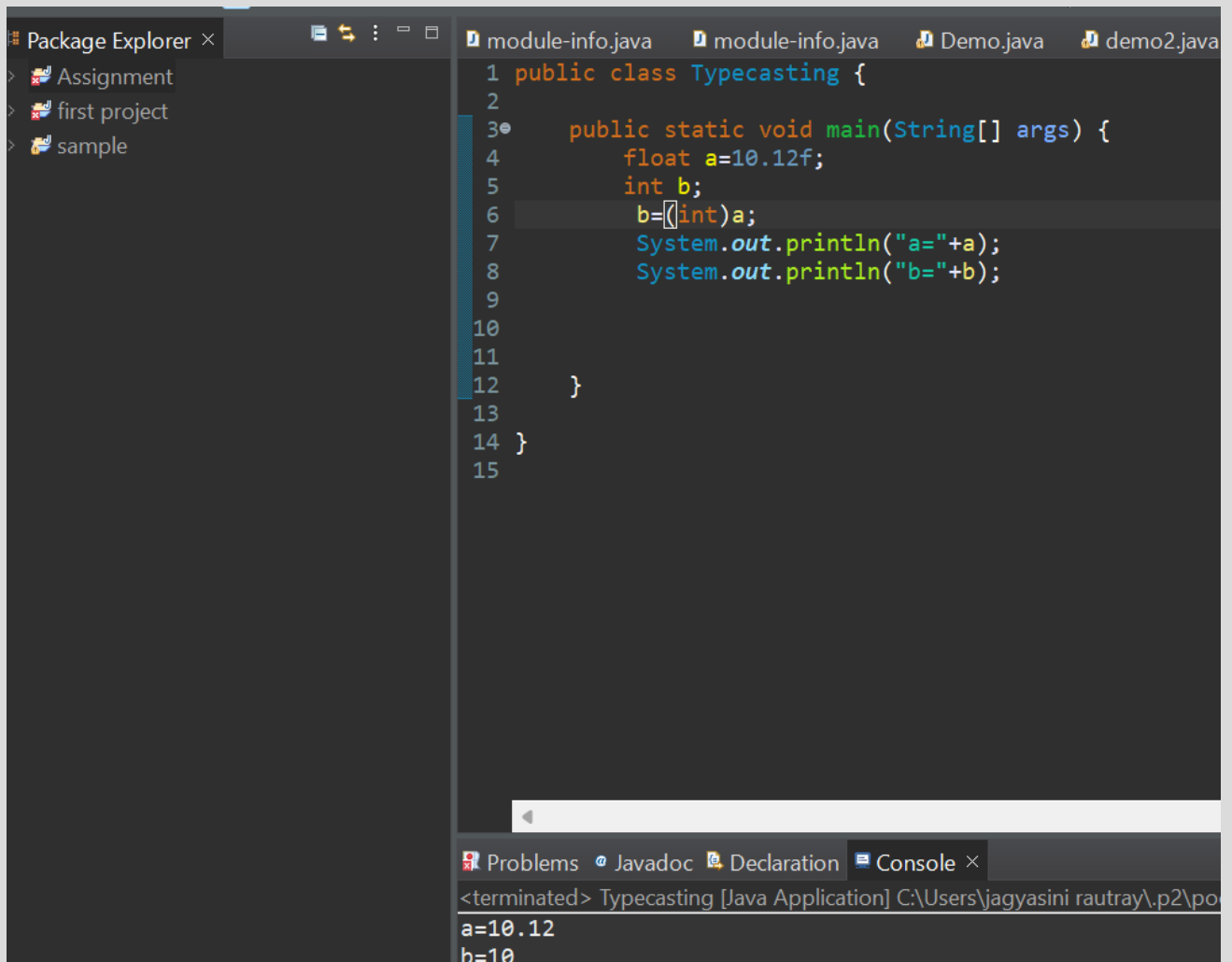
```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         byte b;
6         b=(byte)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\pool\plugin

a=10.12
b=10

Float to int:



The screenshot shows an IDE with the Package Explorer on the left, a code editor in the center, and a Console window at the bottom. The code editor displays a Java class named `Typecasting` with a `main` method. The code casts a float value `10.12f` to an integer `10`. The console window shows the output of the program, which is `a=10.12` and `b=10`.

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         int b;
6         b=(int)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rautray\.p2\po

a=10.12
b=10

Float to long:

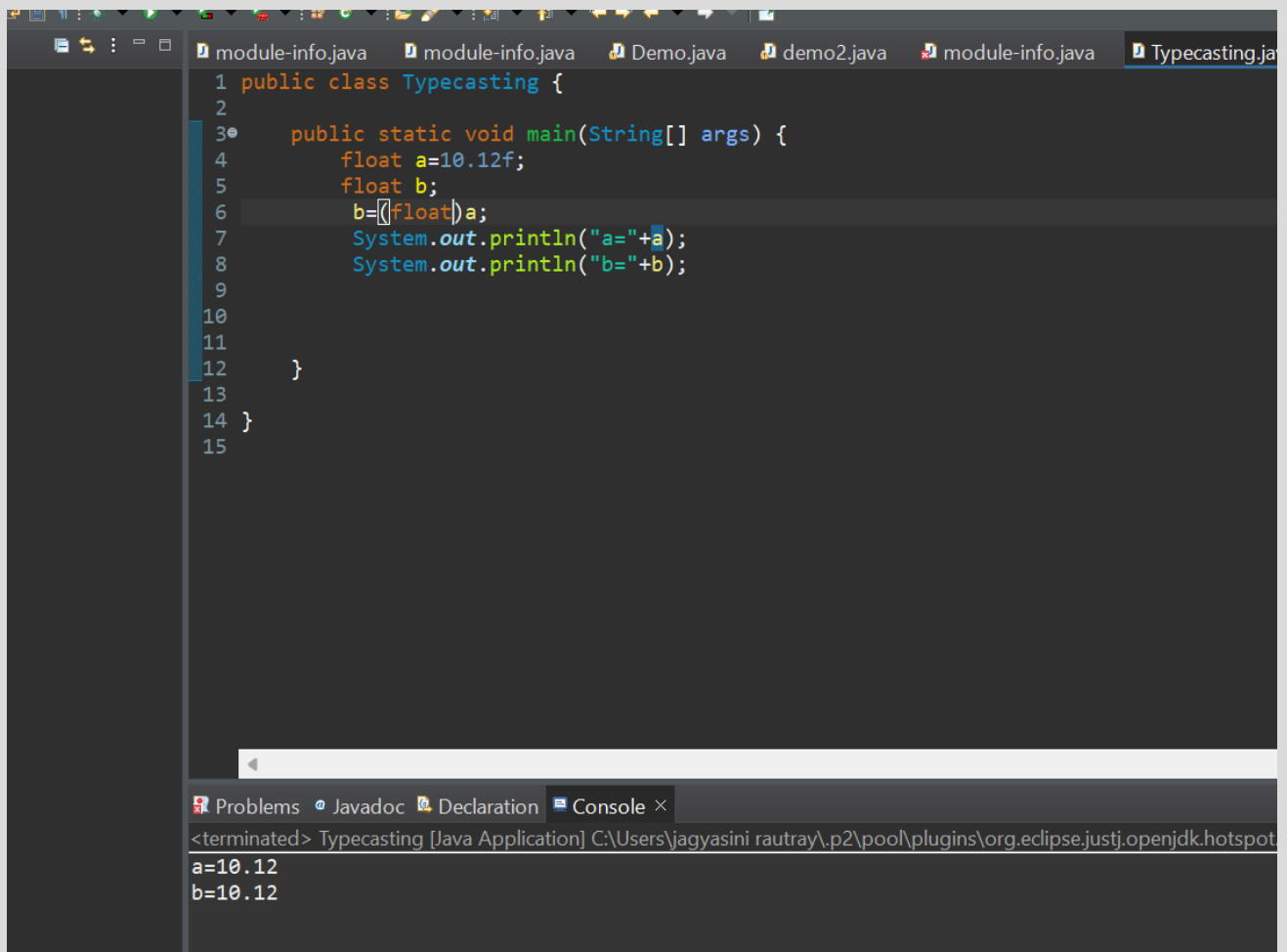
```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         long b;
6         b=(long)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.open...

a=10.12
b=10

Float to float:



The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The main editor displays a Java class named 'Typecasting' with a 'main' method. The code is as follows:

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         float b;
6         b=(float)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

The bottom of the IDE shows the 'Console' tab with the following output:

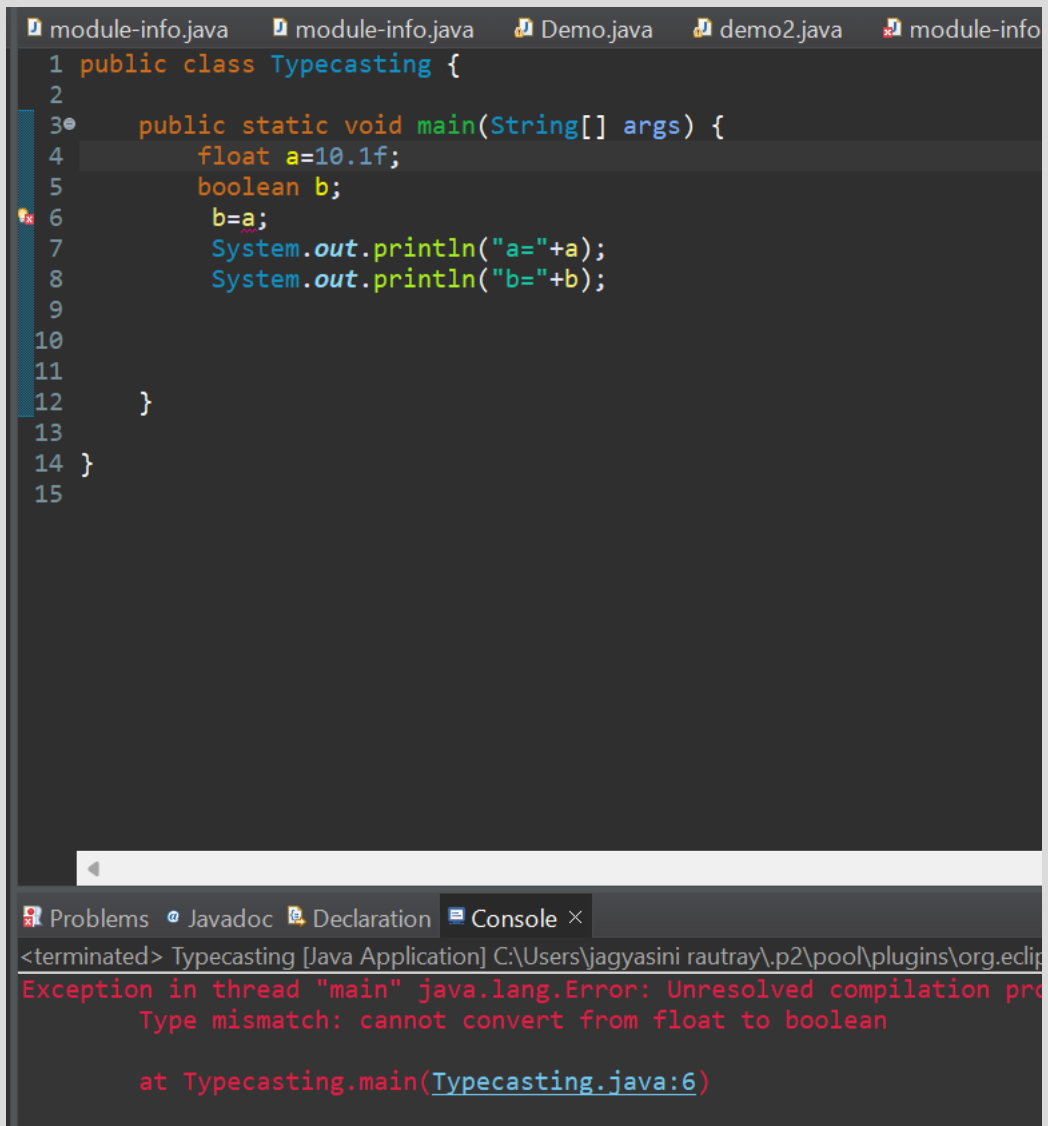
```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot
a=10.12
b=10.12
```

Float to double:

```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  Typecasting.java
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.12f;
5         double b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13 }
14
15
```

```
Problems  Javadoc  Declaration  Console ×
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot
a=10.12
b=10.119999885559082
```

Float to Boolean:



The screenshot shows an IDE with a Java file named `Typecasting.java`. The code defines a `public class Typecasting` with a `main` method. Inside the `main` method, a `float a=10.1f;` is declared, followed by a `boolean b;`. On line 6, the code attempts to assign `b=a;`, which causes a compilation error. The console output shows the error: `Exception in thread "main" java.lang.Error: Unresolved compilation problem: Type mismatch: cannot convert from float to boolean` at `Typecasting.main(Typecasting.java:6)`.

```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         float a=10.1f;
5         boolean b;
6         b=a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

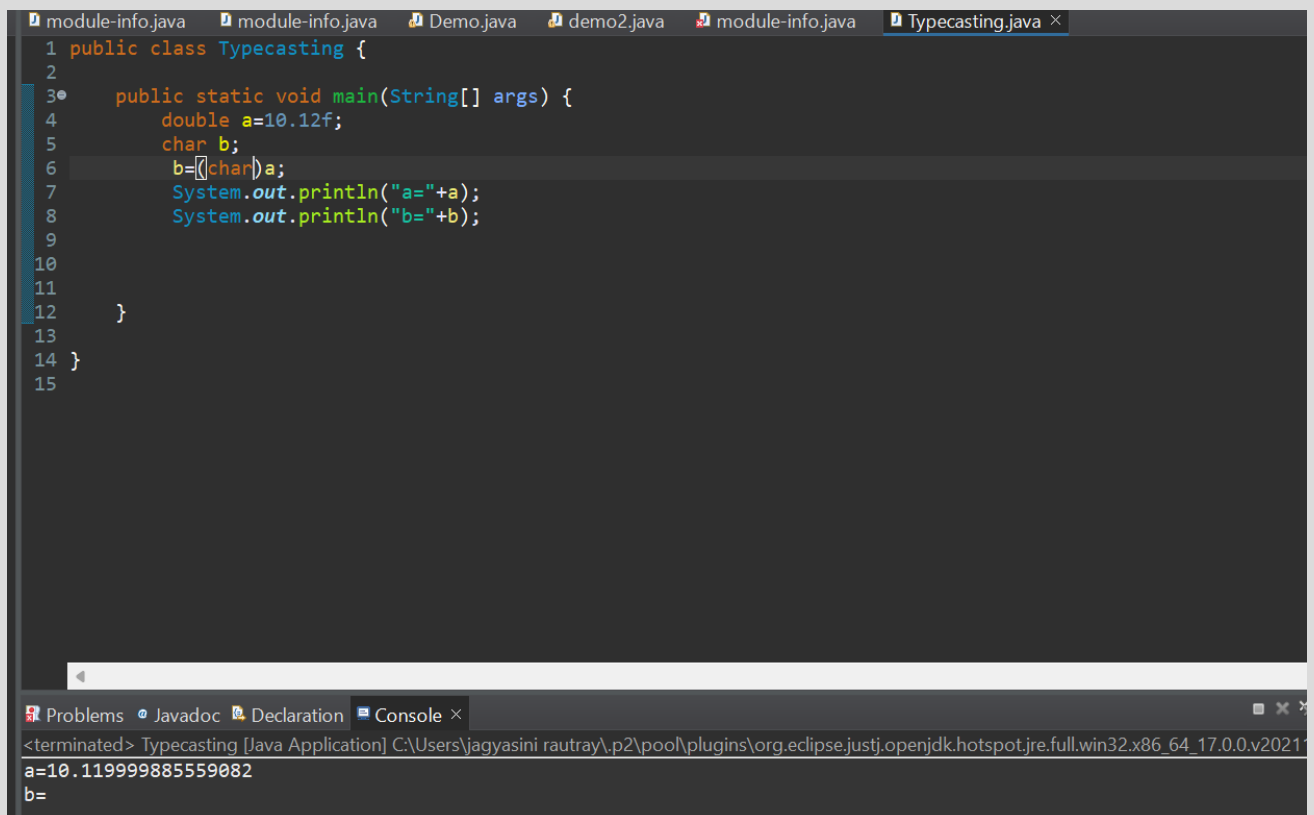
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.jdt.core\bin\jdt_core.jar

Exception in thread "main" java.lang.Error: Unresolved compilation problem: Type mismatch: cannot convert from float to boolean

at Typecasting.main(Typecasting.java:6)

//cannot convert

Double to char:



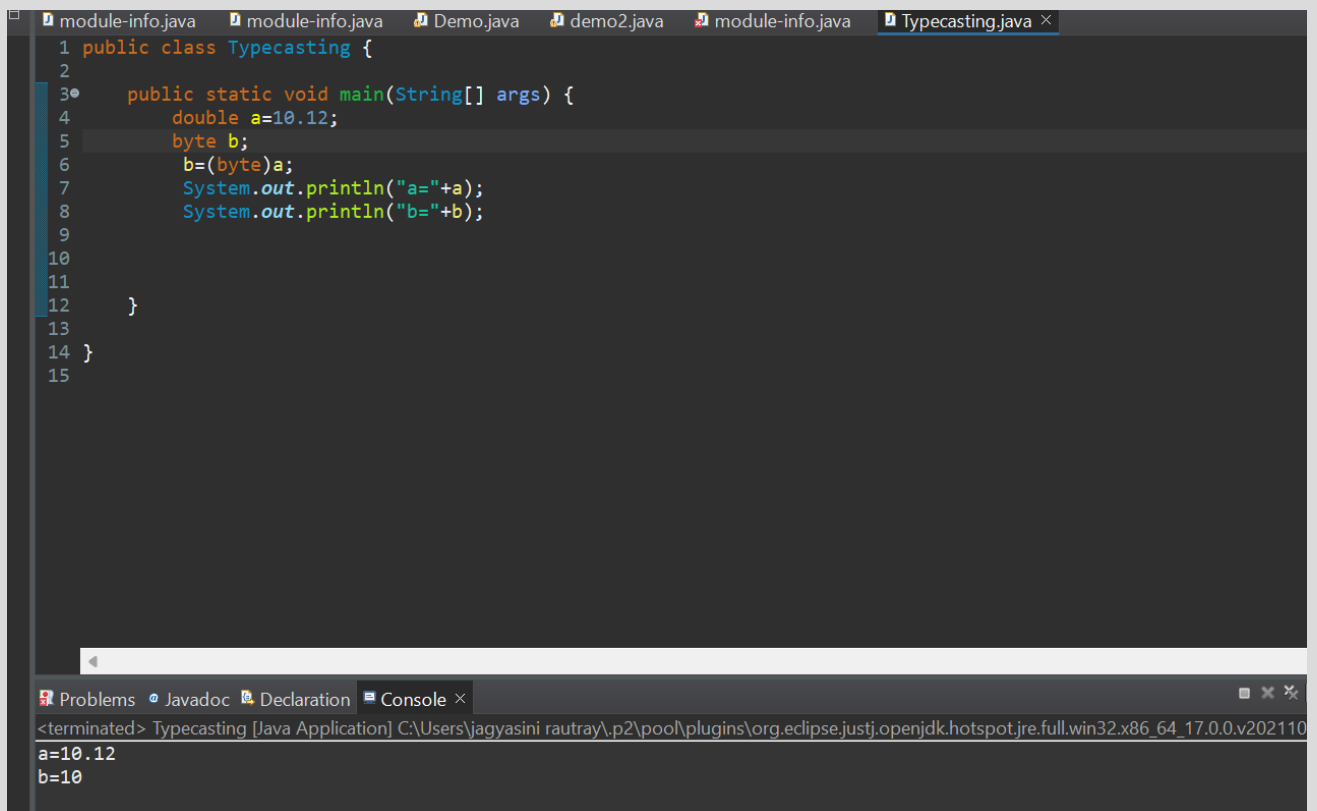
The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The main editor displays a Java file named 'Typecasting.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         double a=10.12f;  
5         char b;  
6         b=(char)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The bottom of the IDE shows the 'Console' tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211  
a=10.119999885559082  
b=
```

Double to byte:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         double a=10.12;
5         byte b;
6         b=(byte)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v202110

a=10.12
b=10

Double to short:

```
module-info.java  module-info.java  Demo.java  demo2.java  module-info.java  type
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         double a=10.12;
5         short b;
6         b=(short)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini rastray\.p2\pool\plugins\org.eclipse.justj.openjd

a=10.12
b=10

Double to int:

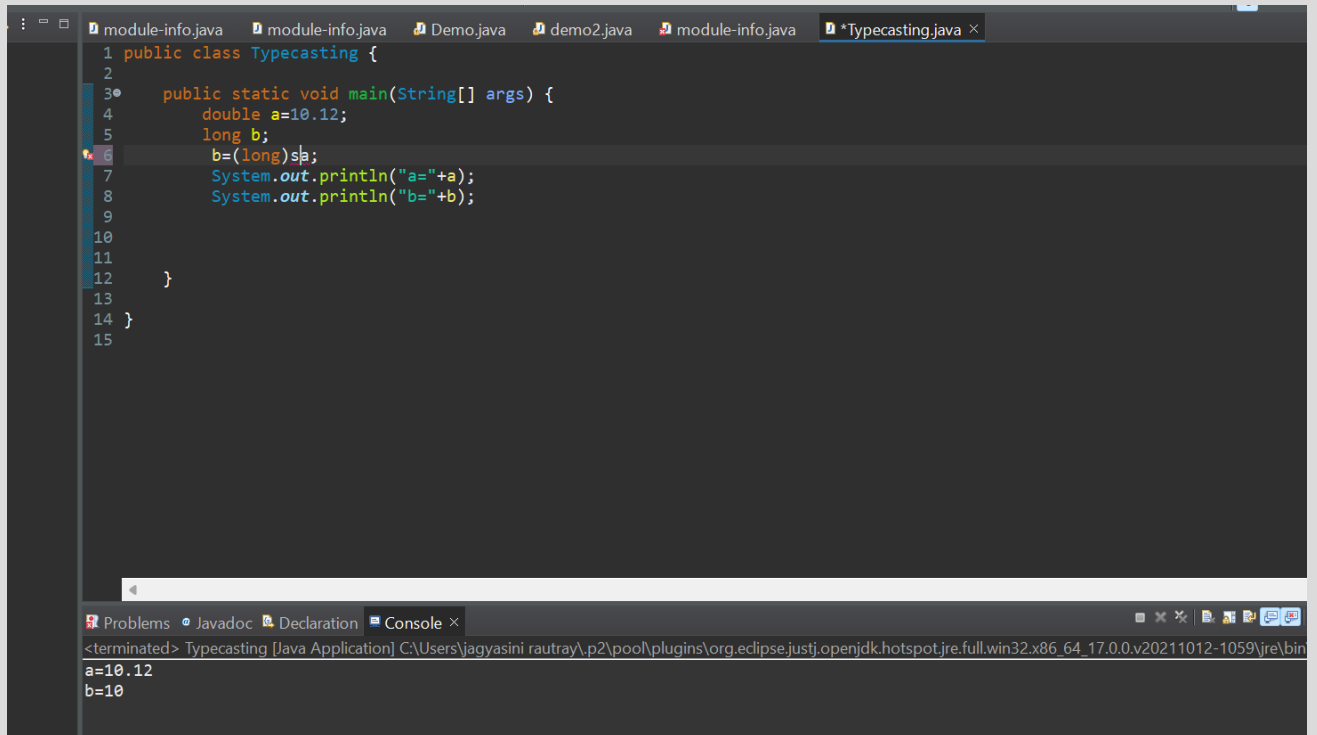
```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         double a=10.12;
5         int b;
6         b=(int)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

Problems Javadoc Declaration Console ×

<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059

a=10.12
b=10

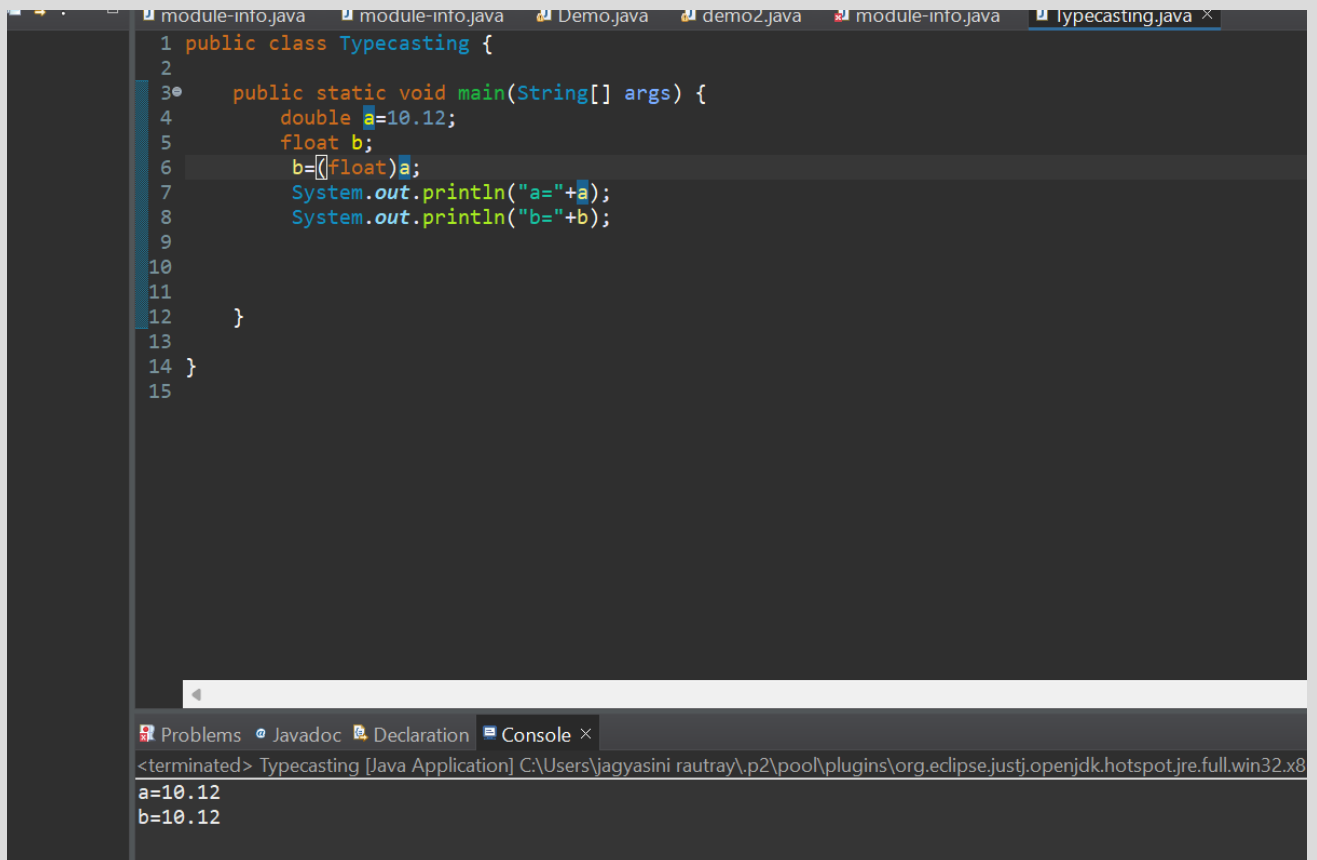
Double to long:



```
1 public class Typecasting {
2
3     public static void main(String[] args) {
4         double a=10.12;
5         long b;
6         b=(long)a;
7         System.out.println("a="+a);
8         System.out.println("b="+b);
9
10
11
12     }
13
14 }
15
```

The screenshot shows the Eclipse IDE with a Java project. The main editor displays the code for `Typecasting.java`. The code defines a `main` method where a `double` variable `a` is assigned the value `10.12`, and a `long` variable `b` is assigned the value of `a` cast to `long` (`(long)a`). The program then prints the values of `a` and `b`. The console output at the bottom shows `a=10.12` and `b=10`, demonstrating that the fractional part of `a` is lost when it is cast to the `long` type `b`.

Double to float:



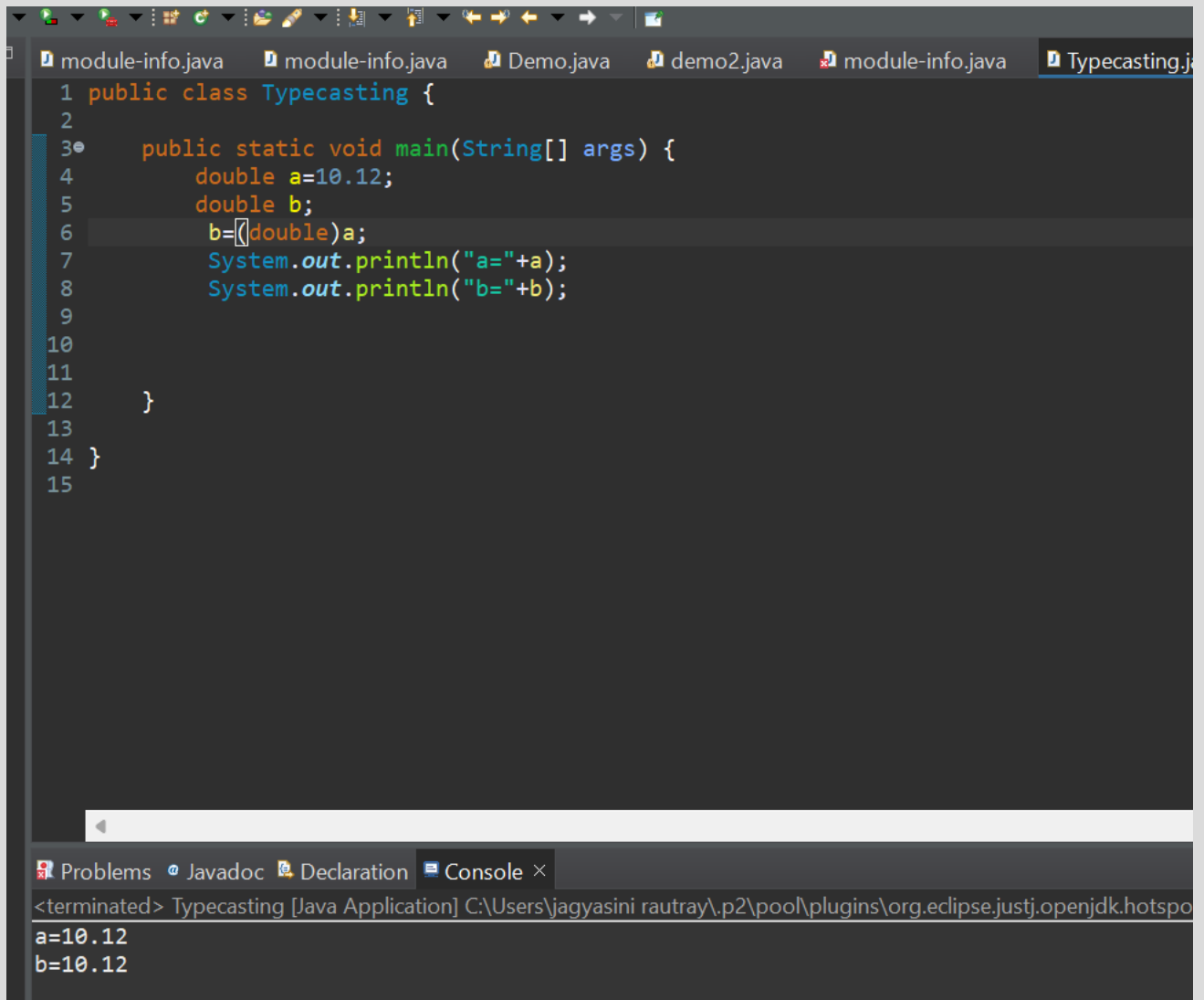
The screenshot shows the Eclipse IDE with a project named 'module-info.java'. The main editor displays the file 'Typecasting.java' with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         double a=10.12;  
5         float b;  
6         b=(float)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The bottom of the IDE shows the 'Console' tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jdk-17.0.2-10202207\bin\java.exe  
a=10.12  
b=10.12
```

Double to double:



The screenshot shows the Eclipse IDE with a Java project. The editor displays a file named `Typecasting.java` with the following code:

```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         double a=10.12;  
5         double b;  
6         b=(double)a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

The bottom of the IDE shows the `Console` tab with the following output:

```
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot  
a=10.12  
b=10.12
```

Double to Boolean:

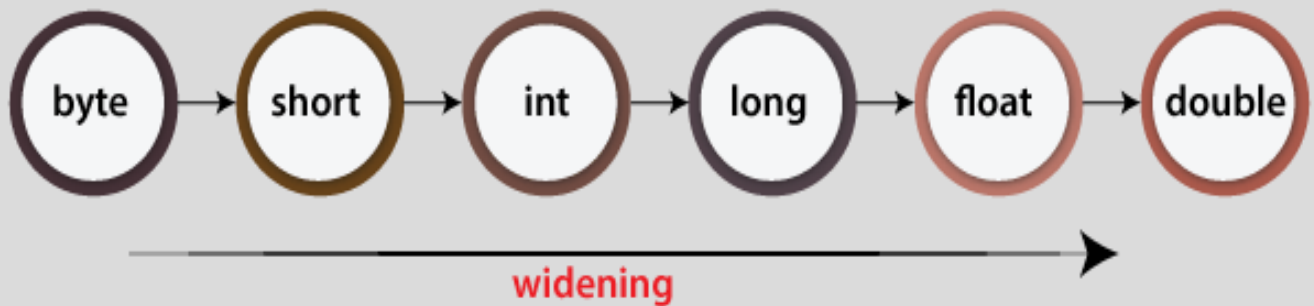
```
1 public class Typecasting {  
2  
3     public static void main(String[] args) {  
4         double a=10.12;  
5         boolean b;  
6         b=a;  
7         System.out.println("a="+a);  
8         System.out.println("b="+b);  
9  
10  
11  
12     }  
13  
14 }  
15
```

Problems Javadoc Declaration Console ×
<terminated> Typecasting [Java Application] C:\Users\jagyasini.rautray\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211017-1920\jre\bin\java.exe
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
Type mismatch: cannot convert from double to boolean

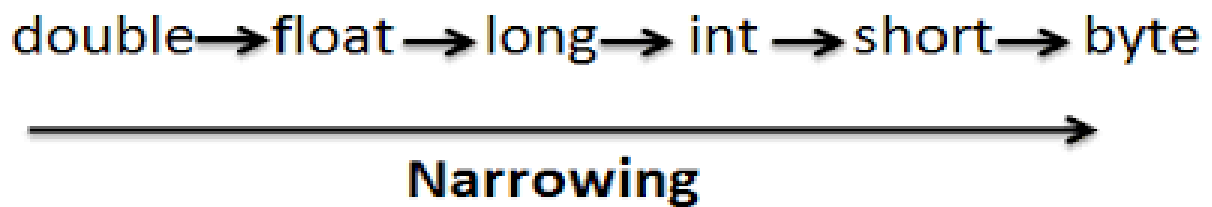
at Typecasting.main(Typecasting.java:6)

//cannot convert

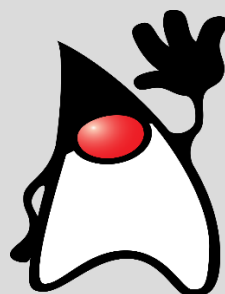
Implicit Typecasting:



Explicit Typecasting:



Not over yet wait wait....



Tabular Solution:

	char	byte	short	int	long	float	double	Boolean
char	NCR	ET	ET	IT	IT	IT	IT	---
byte	ET	NCR	IT	IT	IT	IT	IT	---
short	ET	ET	NCR	IT	IT	IT	IT	---
int	ET	ET	ET	NCR	IT	IT	IT	---
long					NCR			---
float	ET	ET	ET	ET	ET	NCR	IT	---
double	ET	ET	ET	ET	ET	NCR	NCR	---
Boolean	----	---	---	---	---	---	---	NCR

Note---

NCR: -No conversion required

ET: -Explicit Typecasting

IT: -Implicit typecasting

--- - Cannot be converted because Boolean is not numeric type, while the int, char , byte , etc. – are and is only compatible to True and False.

Here, we have taken values in vertical column and used in horizontal row for implementing and knowing whether the output is Explicit or Implicit typecasting.

Such as: -

```
int a=10;  
short b;  
b=a;  
System.out.println("a="+a);  
System.out.println("b="+b);
```

----THANKYOU----