

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. In the center, there is a code editor window titled "Casting.java" which contains the following Java code:

```
class Casting{  
    public static void main(String[] args){  
        byte a=10;  
        short b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

Below the code editor is a Command Prompt window titled "Command Prompt". The command history shows:

```
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin\JAVA FULL STACK>javac Casting.java  
C:\Users\Admin\JAVA FULL STACK>java Casting  
10  
10  
C:\Users\Admin\JAVA FULL STACK>
```

IMPLICIT CASTING

The screenshot shows a Java development environment with two tabs: "Casting.java" and "Casting1.java". The "Casting1.java" tab contains the following code:

```
class Casting1{
    public static void main(String[] args){
        byte a=10;
        int b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

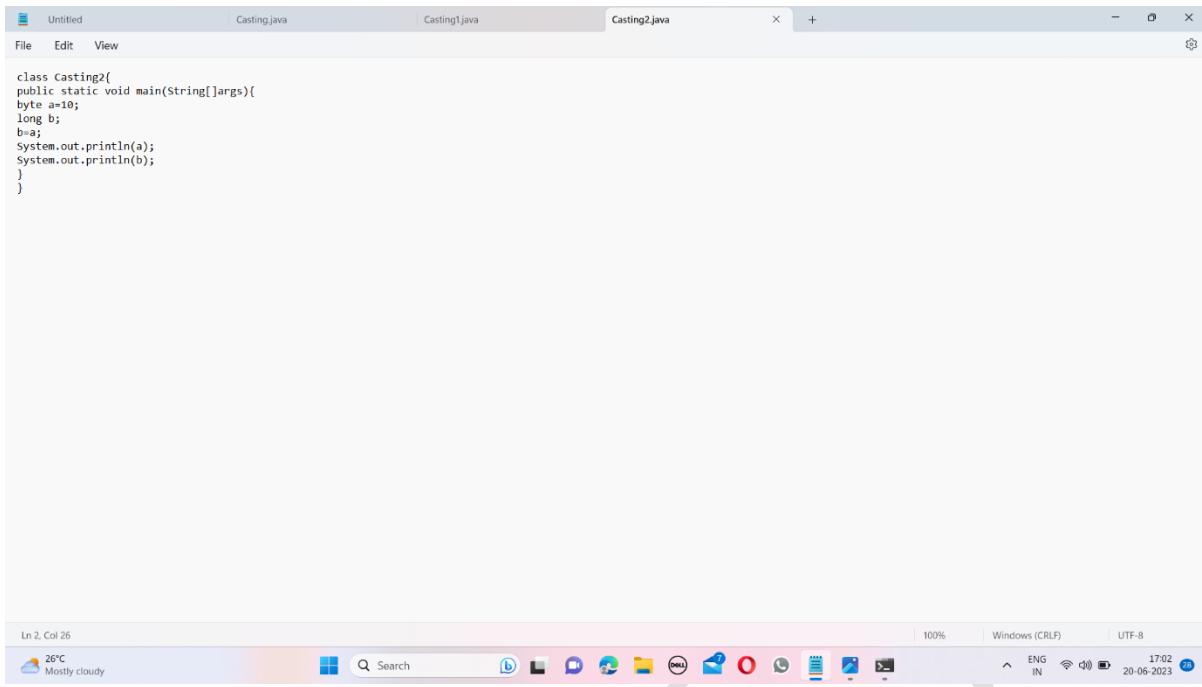
The terminal window below shows the execution of the program:

```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

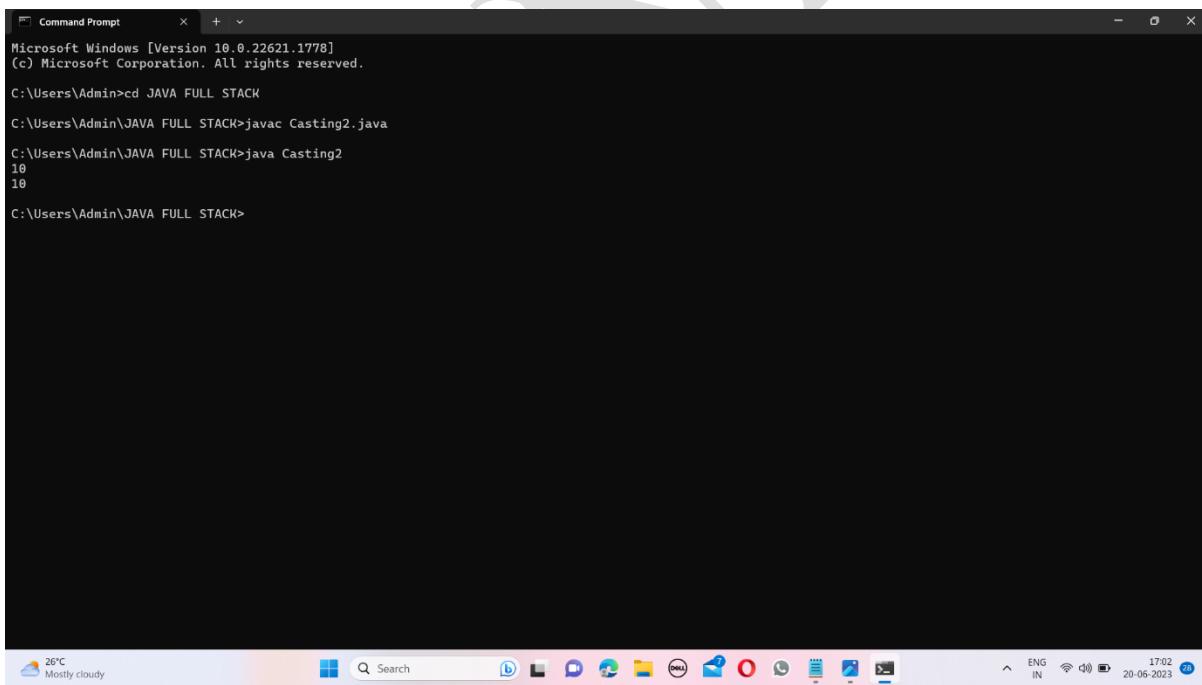
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Casting1.java
C:\Users\Admin\JAVA FULL STACK>java Casting1
10
10

C:\Users\Admin\JAVA FULL STACK>
```

IMPLICIT CASTING



```
class Casting2{
public static void main(String[] args){
byte a=10;
long b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```



```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Casting2.java
C:\Users\Admin\JAVA FULL STACK>java Casting2
10
10

C:\Users\Admin\JAVA FULL STACK>
```

IMPLICIT CASTING

The image shows two screenshots of a Windows desktop environment. The top screenshot displays a Java IDE with five tabs open: Untitled, Casting.java, Casting1.java, Casting2.java, and Casting3.java. The Casting3.java tab is active, showing the following Java code:

```
class Casting3{  
    public static void main($tring[] args){  
        byte a=10;  
        float b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

The status bar at the bottom of the IDE indicates "Ln 2, Col 26". The taskbar below the IDE shows icons for various applications and the weather (26°C, Mostly cloudy). The system tray shows the date (20-06-2023), time (17:08), and battery level.

The bottom screenshot shows a Windows Command Prompt window titled "Command Prompt". The command history and output are as follows:

```
Microsoft Windows [Version 10.0.22621.1778]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin>javac Casting3.java  
C:\Users\Admin>java Casting3  
10  
10.0  
C:\Users\Admin>
```

The taskbar and system tray are identical to the top screenshot.

IMPLICIT CASTING

A screenshot of a Java code editor window titled "Casting4.java". The code contains a casting error:class Casting4{ public static void main(String[] args){ byte a=10; double b; b=a; System.out.println(a); System.out.println(b); } }The code attempts to assign the value of a byte variable 'a' to a double variable 'b' without explicit casting. The editor highlights this line with a red squiggly underline. The status bar at the bottom shows "Ln 9, Col 2". The taskbar at the bottom includes icons for weather (26°C), search, file explorer, and other system tools.

A screenshot of a Windows Command Prompt window titled "Command Prompt". The user runs the command "javac Casting4.java" to compile the Java code. The output shows the compilation errors due to the casting error in the code. The status bar at the bottom shows "26°C Mostly cloudy" and the date/time "20-06-2023 17:12".Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Casting4.java
C:\Users\Admin\JAVA FULL STACK>java Casting4
10
10.0
C:\Users\Admin\JAVA FULL STACK>

IMPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with several open tabs: Untitled, Casting.java, Casting1.java, Casting2.java, Casting3.java, Casting4.java, and Casting5.java. The Casting5.java tab is currently active. Below the tabs, there is a menu bar with File, Edit, and View options. The main area of the window displays the following Java code:

```
class Casting5{  
    public static void main(String[] args){  
        byte a=10;  
        char b;  
        b= (char)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

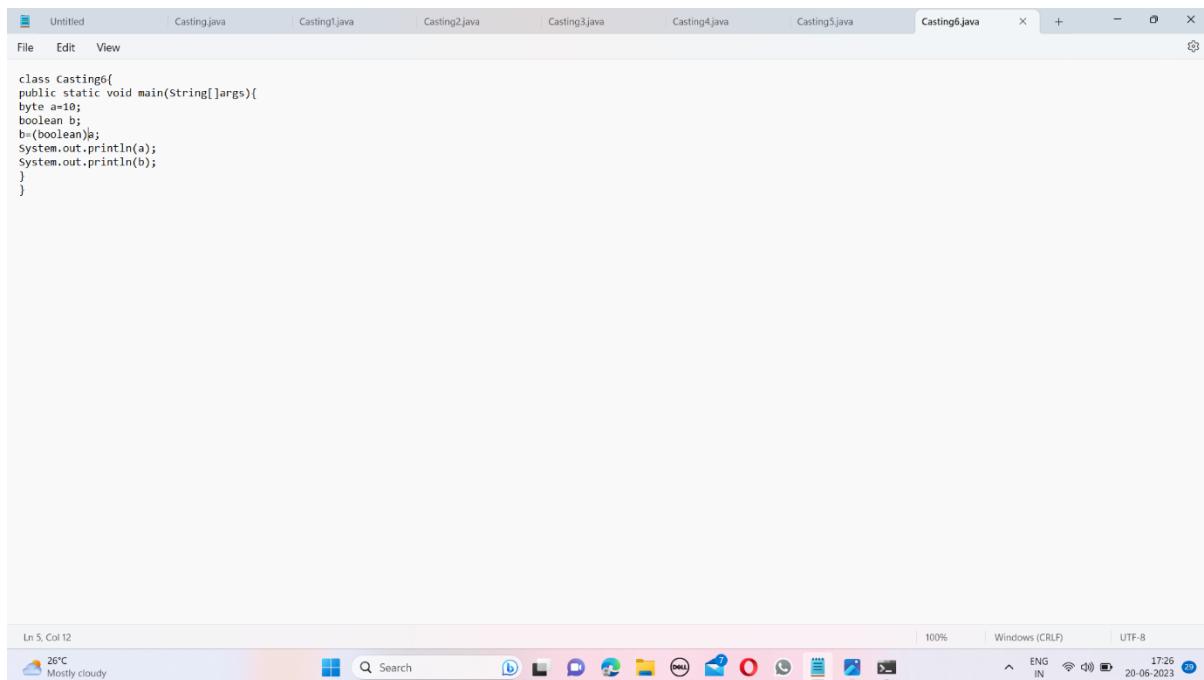
Below the code, it says "Ln 5, Col 5". The status bar at the bottom shows "100% Windows (CRLF) UTF-8".

Below the IDE window, the desktop background is visible, showing a pinkish gradient. A Command Prompt window is open, showing the following command-line session:

```
Microsoft Windows [Version 10.0.22621.1778]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin\JAVA FULL STACK>javac Casting5.java  
C:\Users\Admin\JAVA FULL STACK>java Casting5  
10
```

The Command Prompt window has a title bar "Command Prompt" and a status bar at the bottom showing "26°C Mostly cloudy", "ENG IN", "17:19", and "20-06-2023".

IMPLICIT CASTING



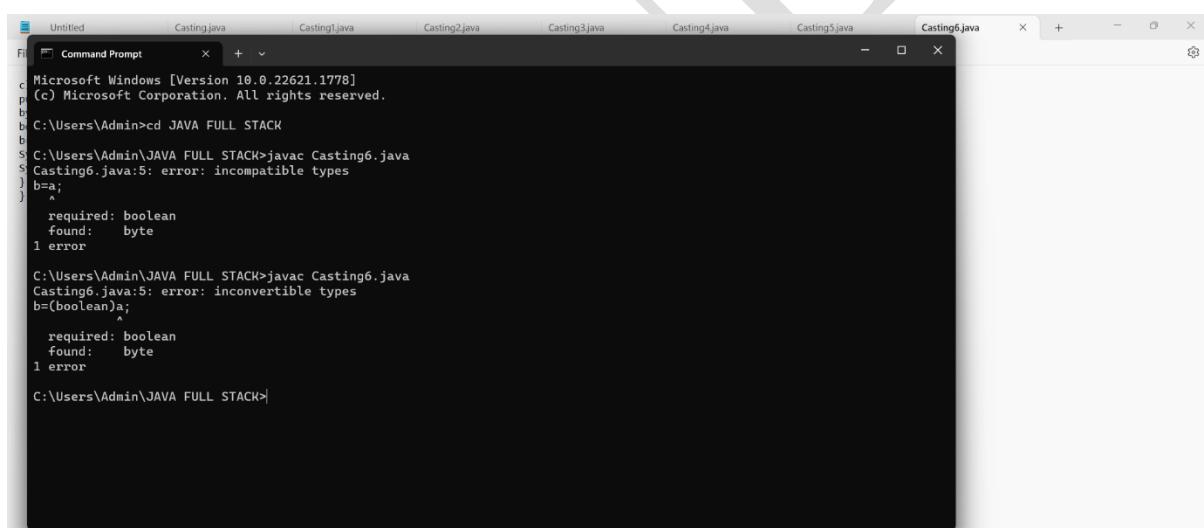
The screenshot shows a Java IDE interface with multiple tabs at the top: Untitled, Casting.java, Casting1.java, Casting2.java, Casting3.java, Casting4.java, Casting5.java, and Casting6.java. The Casting6.java tab is active. The code in Casting6.java is:

```

class Casting6{
    public static void main(String[] args){
        byte a=10;
        boolean b;
        b=(boolean)a;
        System.out.println(a);
        System.out.println(b);
    }
}

```

The status bar at the bottom indicates "Ln 5, Col 12". The taskbar below the IDE shows various pinned icons and the date/time "20-06-2023 17:23".



The screenshot shows a Command Prompt window titled "Command Prompt". The output shows two attempts to compile the Casting6.java file:

```

Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin>JAVA FULL STACK>javac Casting6.java
Casting6.java:5: error: incompatible types
b=(boolean)a;
          ^
 required: boolean
 found:    byte
1 error

C:\Users\Admin>JAVA FULL STACK>javac Casting6.java
Casting6.java:5: error: inconvertible types
b=(boolean)a;
          ^
 required: boolean
 found:    byte
1 error

C:\Users\Admin>JAVA FULL STACK>

```

The status bar at the bottom indicates "Ln 5, Col 12". The taskbar below the Command Prompt shows various pinned icons and the date/time "20-06-2023 17:26".

CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons for search, file explorer, and system controls. Below the taskbar, there are two windows open:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program. The output is:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

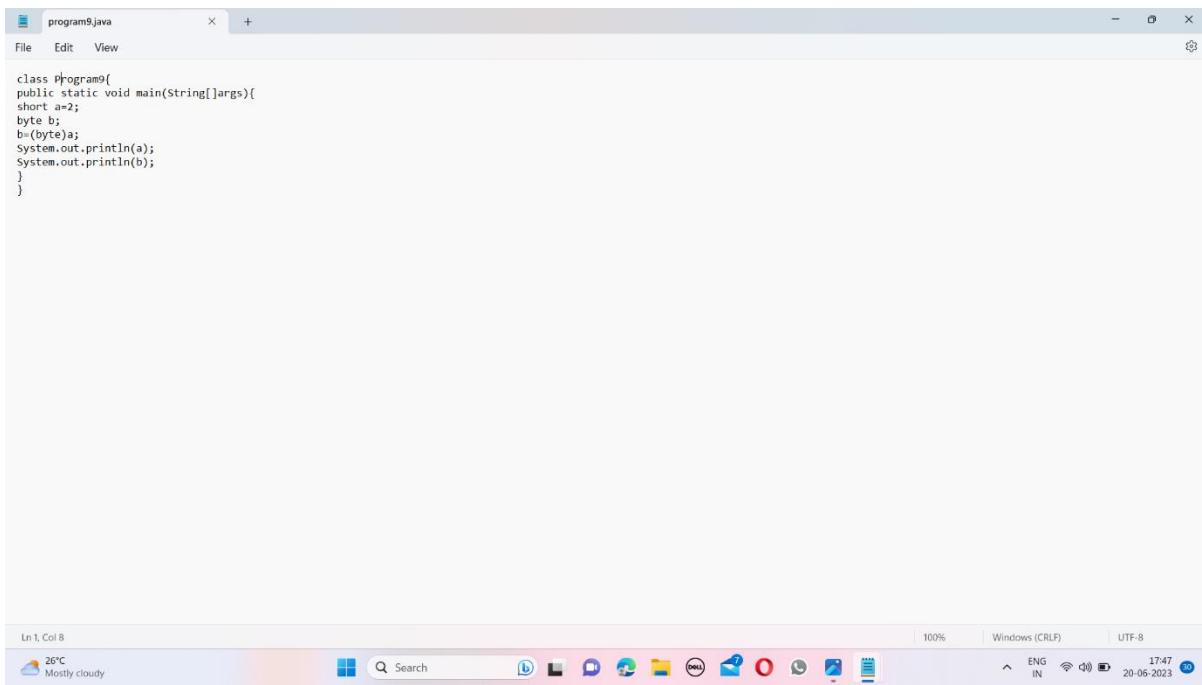
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Byte.java
C:\Users\Admin\JAVA FULL STACK>java Byte
10
10

C:\Users\Admin\JAVA FULL STACK>
```
- Code Editor:** A window titled "Byte.java" containing the following Java code:

```
class Byte{
    public static void main(String[] args){
        byte a=10;
        byte b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

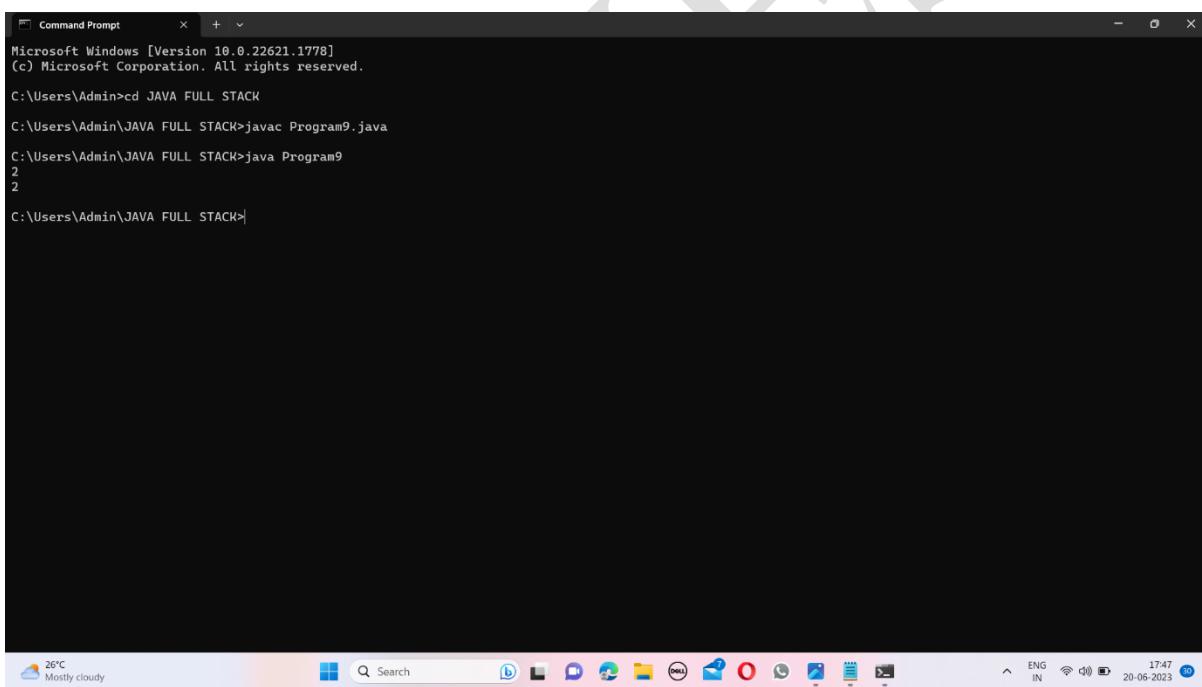
The desktop background features a large watermark of the letter "Y".

CASTING IS NOT REQUIRED



```
program9.java
File Edit View
class Program9{
public static void main(String[] args){
short a=2;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}

Ln 1, Col 8
```

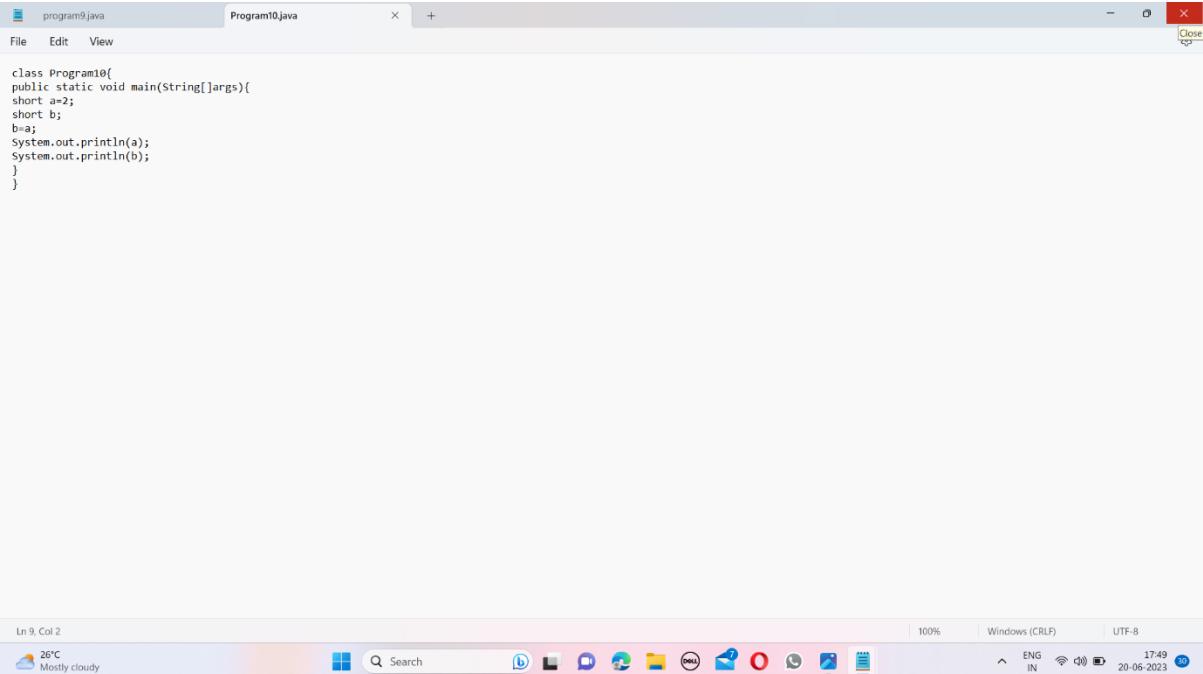


```
Command Prompt
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program9.java
C:\Users\Admin\JAVA FULL STACK>java Program9
2
2

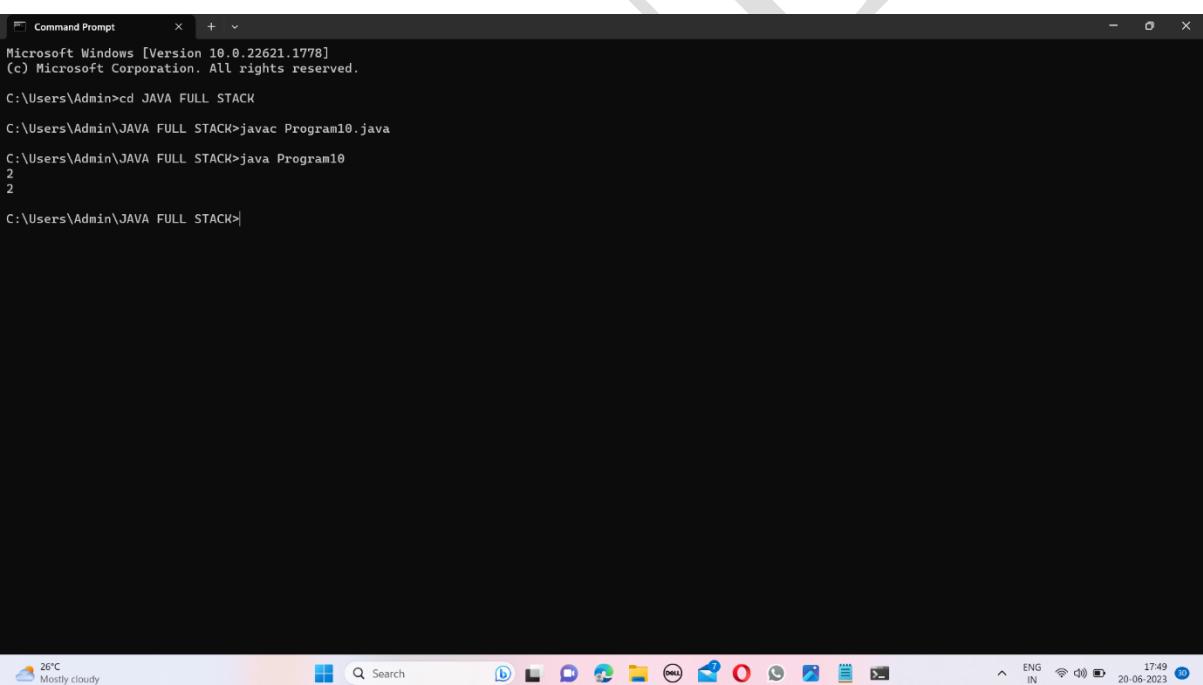
C:\Users\Admin\JAVA FULL STACK>
```

EXPLICIT TYPE CASTING



```
class Program10{
    public static void main(String[] args){
        short a=2;
        short b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

Ln 9, Col 2



```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin>javac Program10.java
C:\Users\Admin>java Program10
2
2

C:\Users\Admin>JAVA FULL STACK>
```

CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with several icons. In the center, there is a code editor window titled "Program11.java" which contains the following Java code:

```
class Program11{  
    public static void main(String[] args){  
        short a=2;  
        int b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

Below the code editor is a status bar showing "Ln 9, Col 2". The main window title bar also displays "Program11.java". The desktop background is white.

At the bottom of the screen, there is a Command Prompt window titled "Command Prompt". It shows the following command-line session:

```
Microsoft Windows [Version 10.0.22621.1778]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin\JAVA FULL STACK>javac Program11.java  
C:\Users\Admin\JAVA FULL STACK>java Program11  
2  
2  
2  
C:\Users\Admin\JAVA FULL STACK>
```

The Command Prompt window has a dark theme. The desktop background is white.

IMPLICIT CASTING

A screenshot of a Windows desktop environment showing two windows. The top window is a code editor titled 'Program12.java' containing the following Java code:

```
class Program12{
    public static void main(String[] args){
        short a=2;
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The bottom window is a Command Prompt titled 'Command Prompt' showing the execution of the program:

```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program11.java
C:\Users\Admin\JAVA FULL STACK>java Program11
2
2

C:\Users\Admin\JAVA FULL STACK>
```

IMPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, several Java source files are listed in tabs: "program9.java", "Program10.java", "Program11.java", "Program12.java", "Program13.java". The "Program13.java" tab is currently active. The code editor window displays the following Java program:

```
class Program13{  
public static void main(String[] args){  
short a=2;  
float b;  
b=a;  
System.out.println(a);  
System.out.println(b);  
}  
}|
```

At the bottom of the code editor, it shows "Ln 9, Col 2". Above the code editor, a Command Prompt window is open, showing the output of running the program:

```
Microsoft Windows [Version 10.0.2621.1778]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin\JAVA FULL STACK>javac Program13.java  
C:\Users\Admin\JAVA FULL STACK>java Program13  
2  
2.0
```

IMPLICIT CASTING

Command Prompt

```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program14.java
C:\Users\Admin\JAVA FULL STACK>java Program14
2
2.0

C:\Users\Admin\JAVA FULL STACK>
```

26°C
Mostly cloudy

Search ENG IN 17:58 20-06-2023

program9.java Program10.java Program11.java Program12.java Program13.java Program14.java

File Edit View

```
class Program14{
public static void main(String[] args){
short a=2;
double b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

Ln 9, Col 2

26°C
Mostly cloudy

Search Windows (CRLF) 100% UTF-8 ENG IN 17:59 20-06-2023

IMPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a Command Prompt window titled "Command Prompt" with the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program15.java
C:\Users\Admin\JAVA FULL STACK>java Program15
2
e

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt is a Java code editor window titled "Program15.java" containing the following code:

```
class Program15{
    public static void main(String[] args){
        short a=2;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The status bar at the bottom of the code editor indicates "Ln 5, Col 9".

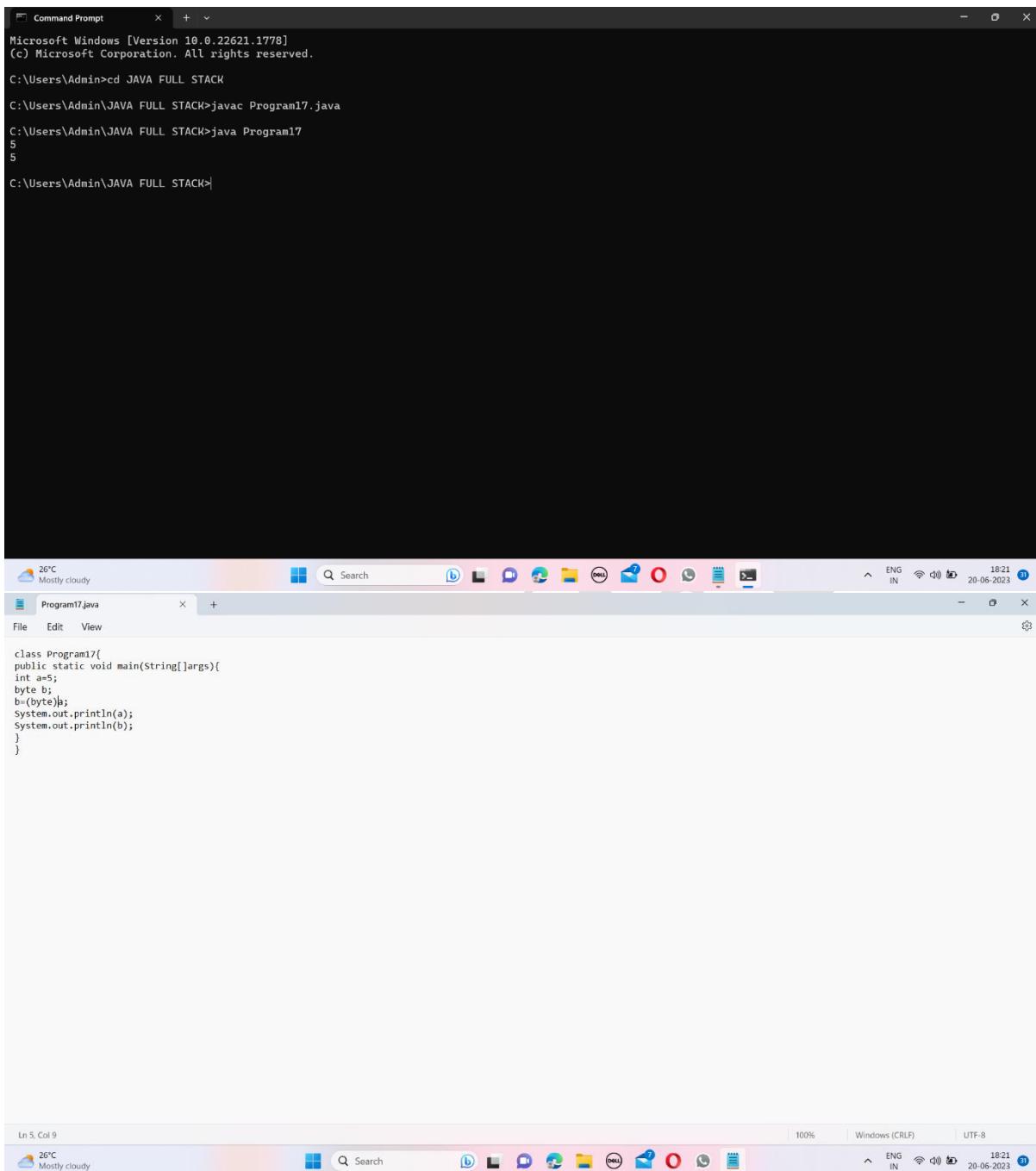
The taskbar at the bottom of the screen shows several open application icons, including File Explorer, Mail, and various browser and utility icons. The system tray shows the date and time as "20-06-2023 18:01".

EXPLICIT CASTING

The screenshot shows a Windows desktop environment with the following components:

- Command Prompt Window:** Located at the top left, it displays the output of a Java compilation command. The error message indicates that there is an inconvertible type error between a boolean variable and a short variable.
- Java Code Editor:** Located in the center, it shows the Java code for Program16.java. The code attempts to assign the value of a boolean variable 'a' (which is initialized to 2) to a short variable 'b' and then prints both variables.
- Java Runtime Environment:** Located at the bottom right, it shows the Java application window titled "Program16.java". The window displays the output of the program, which is "2" followed by a blank line.

TYPE CASTING IS NOT POSSIBLE



The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. Below the taskbar, two windows are open:

- Command Prompt**: A black terminal window titled "Command Prompt". It displays the following text:

```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program17.java
C:\Users\Admin\JAVA FULL STACK>java Program17
5
5

C:\Users\Admin\JAVA FULL STACK>
```
- Program17.java**: A Notepad window titled "Program17.java". It contains the following Java code:

```
class Program17{
public static void main(String[]args){
int a=5;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with a Java application running. At the top, there's a window titled "Program17.java" which contains the following Java code:

```
class Program18{  
    public static void main(String[] args){  
        int a=5;  
        short b;  
        b=(short)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

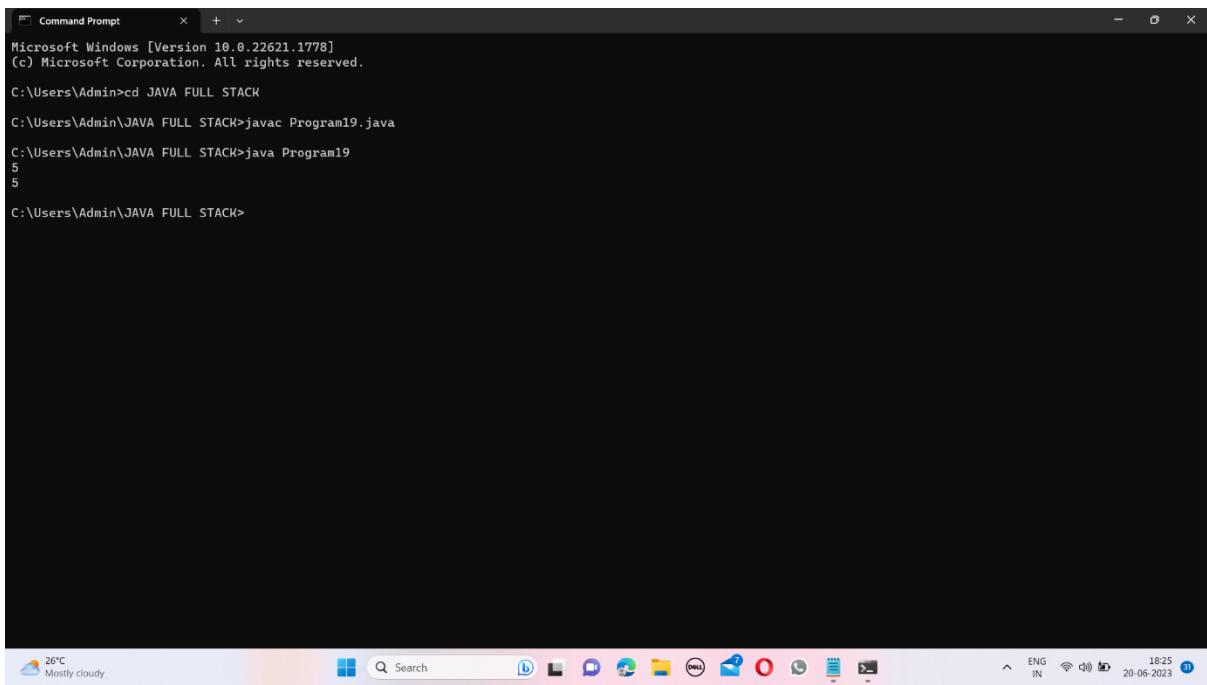
Below this, another tab is visible with the title "Program18.java". The menu bar includes "File", "Edit", and "View". The status bar at the bottom indicates "Ln 5, Col 10".

Below the IDE, the Windows taskbar shows the date and time as "20-06-2023 18:23". It also displays icons for various system and application notifications.

The main focus is a Command Prompt window titled "Command Prompt" located in the center of the screen. The command history shows:

```
C:\Users\Admin>cd JAVA FULL STACK  
C:\Users\Admin\JAVA FULL STACK>javac Program18.java  
C:\Users\Admin\JAVA FULL STACK>java Program18  
5  
5
```

The Command Prompt window has a dark background and white text. The status bar at the bottom of the Command Prompt window also shows the date and time as "20-06-2023 18:23".



The screenshot shows a Microsoft Windows Command Prompt window titled "Command Prompt". The window displays the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program19.java
C:\Users\Admin\JAVA FULL STACK>java Program19
5
5

C:\Users\Admin\JAVA FULL STACK>
```

The command prompt shows the execution of a Java program named "Program19.java" which outputs the value "5" twice. The window is set against a background of a desktop environment with a watermark reading "KODNEX" diagonally across it.

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and a weather widget showing "26°C Mostly cloudy". Below the taskbar, there is a window titled "Command Prompt" which displays the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program20.java
C:\Users\Admin\JAVA FULL STACK>java Program20
5
5

C:\Users\Admin\JAVA FULL STACK>
```

Below the command prompt window, there is an IDE interface with multiple tabs open: "Program17.java", "Program18.java", "Program19.java", and "Program20.java". The "Program20.java" tab is currently active. The code for Program20.java is visible:

```
class Program20{
    public static void main(String[] args){
        int a=5;
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The status bar at the bottom of the IDE shows "Ln 4, Col 5", "100%", "Windows (CRLF)", "UTF-8", and the system date and time "20-06-2023".

IMPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top is a taskbar with various icons. Below it is a window titled "Command Prompt" showing Java command-line output. Another window below it displays Java code for "Program21.java". The code defines a class Program21 with a main method that prints the values of integers a and b.

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program21.java
C:\Users\Admin\JAVA FULL STACK>java Program21
5
5.0

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program21{
public static void main(String[] args){
int a=5;
float b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

IMPLICIT CASTING

Command Prompt

```
Microsoft Windows [Version 10.0.22621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program22.java
C:\Users\Admin\JAVA FULL STACK>java Program22
5
5.0

C:\Users\Admin\JAVA FULL STACK>
```

26°C
Mostly cloudy

Search

Program17.java Program18.java Program19.java Program20.java Program21.java Program22.java

File Edit View

```
class Program22{
public static void main(String[] args){
int a=5;
double b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

Ln 4, Col 8

Windows (CRLF) UTF-8

26°C
Mostly cloudy

IMPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. Below the taskbar, a Command Prompt window is open, displaying the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program23.java
C:\Users\Admin\JAVA FULL STACK>java Program23
5
C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt, a Java code editor window titled "Program23.java" is visible. The code contains the following Java program:

```
class Program23{
    public static void main(String[] args){
        int a=5;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The code editor window also displays status information at the bottom: "Ln 5, Col 4", "100%", "Windows (CRLF)", and "UTF-8".

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying Java compilation errors. To the right of the Command Prompt is a code editor window showing Java code. The code attempts to assign a character value to a boolean variable.

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program24.java
Program24.java:5: error: incompatible types
b=(char)a;
^
 required: boolean
 found:    char
1 error

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program24{
public static void main(String[] args){
int a=5;
boolean b;
b=(char)a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a file explorer window is open, showing a list of Java files: Program17.java, Program18.java, Program19.java, Program20.java, Program21.java, Program22.java, Program23.java, Program24.java, and Program25.java. The file 'Program25.java' is currently selected and is displayed in a large code editor window below it. The code in 'Program25.java' is as follows:

```
class Program25{  
    public static void main(String[] args){  
        long a=5;  
        byte b;  
        b=(byte)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

At the bottom of the screen, another taskbar is visible, identical to the one at the top.

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. Below the taskbar, a Command Prompt window is open, displaying the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program26.java
C:\Users\Admin\JAVA FULL STACK>java Program26
5
5

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt is a Java code editor window titled "Program26.java". The code is as follows:

```
class Program26{
    public static void main(String[] args){
        long a=5;
        short b;
        b=(short)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The status bar at the bottom of the code editor indicates "Ln 5, Col 10". Above the code editor, the taskbar shows several other Java files: Program17.java, Program18.java, Program19.java, Program20.java, Program21.java, Program22.java, Program23.java, Program24.java, Program25.java, and Program26.java.

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying the output of a Java program. The code editor window below it shows the Java code for Program27.java.

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program27.java
C:\Users\Admin\JAVA FULL STACK>java Program27
5
5

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program27{
public static void main(String[] args){
long a=5;
int b;
b=(int)a;
System.out.println(a);
System.out.println(b);
}
}
```

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying the output of a Java program. The code editor window below it shows the Java code for Program28.java.

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program28.java
C:\Users\Admin\JAVA FULL STACK>java Program28
5
5

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program28{
public static void main(String[] args){
long a=5;
long b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying the output of a Java program. The Java code editor window below it shows the source code for Program29.java.

Command Prompt Output:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program29.java
C:\Users\Admin\JAVA FULL STACK>java Program29
5
5.0

C:\Users\Admin\JAVA FULL STACK>
```

Java Code Editor (Program29.java):

```
class Program29{
    public static void main(String[] args){
        long a=5;
        float b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

System Status:

- Temperature: 25°C, Mostly cloudy
- Network: ENG IN
- Date: 20-06-2023
- Time: 18:45

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, there are two windows: a Command Prompt window and a Java code editor.

Command Prompt Window:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program30.java
C:\Users\Admin\JAVA FULL STACK>java Program30
5
5.0

C:\Users\Admin\JAVA FULL STACK>
```

Java Code Editor:

```
class Program30{
public static void main(String[] args){
long a=5;
double b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

The code editor window has tabs for multiple Java files, and the status bar at the bottom indicates "Ln 4, Col 7".

IMPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with several windows open:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program execution.
- Java Code Editor:** An IDE window titled "Program31.java" containing the Java code for explicit casting.
- Java Runtime Environment:** A window titled "Program31" showing the output of the program's execution.

Command Prompt Output:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program31.java
C:\Users\Admin\JAVA FULL STACK>java Program31
5
5

C:\Users\Admin\JAVA FULL STACK>
```

Java Code Editor Content:

```
class Program31{
public static void main(String[] args){
long a=5;
char b;
b=(char)a;
System.out.println(a);
System.out.println(b);
}
}
```

Java Runtime Environment Output:

```
5
5
```

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, two windows are open: a Command Prompt window and a code editor window.

Command Prompt Window:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program32.java
Program32.java:5: error: incompatible types
b=(boolean)a;
           ^
       required: boolean
       found:    long
1 error

C:\Users\Admin\JAVA FULL STACK>
```

Code Editor Window:

```
class Program32{
public static void main(String[] args){
long a=5;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

The code editor window shows a Java program named Program32. It attempts to assign the value of a long variable 'a' (which is 5) to a boolean variable 'b' using a cast. This results in a compilation error because it is impossible to convert a long value to a boolean value.

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, two windows are open: a Command Prompt window and a code editor window.

Command Prompt Window:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program33.java
C:\Users\Admin\JAVA FULL STACK>java Program33
3.0
3

C:\Users\Admin\JAVA FULL STACK>
```

Code Editor Window:

```
class Program33{
public static void main(String[] args){
float a=3;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

The code editor window shows Java code for explicit casting from a float variable to a byte variable. The output of the program is displayed in the Command Prompt window below, showing the float value 3.0 and the byte value 3.

EXPLICIT CASTING

The screenshot shows a Windows desktop environment with several open windows:

- Command Prompt Window:** Shows the output of running a Java program. The command `javac Program34.java` was run, followed by `java Program34`, which printed the value `3` to the console.
- Java Code Editor:** Displays the source code for `Program34.java`. The code demonstrates explicit casting from a float variable `a` to a byte variable `b`.
- Browser Window:** Shows a search results page for "EXPLICT CASTING".

The taskbar at the bottom of the screen includes icons for various programs and system status indicators like battery level and network connection.

```
class Program34{  
public static void main(String[] args){  
float a=3;  
byte b;  
b=(byte)a;  
System.out.println(a);  
System.out.println(b);  
}  
}
```

EXPLICIT CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java program. The command `javac Program35.java` was run, followed by `java Program35`, which printed the values 3 and 0 to the console.
- Java Code Editor:** Displays the Java code for Program35. It defines a class with a main method that initializes a float variable 'a' to 3, converts it to a short type, and then prints both 'a' and 'b' to the console.
- Browser Window:** Shows a search results page for "EXPLICT CASTING". The search bar contains the query "EXPLICT CASTING".

EXPLICT CASTING

The screenshot shows a Windows desktop environment. At the top is a Command Prompt window titled "Command Prompt" with the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program36.java
C:\Users\Admin\JAVA FULL STACK>java Program36
3
3

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt is a Java code editor window showing the following code:

```
class Program36{
    public static void main(String[] args){
        float a=3;
        int b;
        b=(int)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The taskbar at the bottom of the screen displays several open windows and icons, including "Program22.j", "Program23.j", "Program24.j", "Program25.j", "Program26.j", "Program28.j", "Program29.j", "Program30.j", "Program31.j", "Program33.j", "Program34.j", "Program35.j", and "Program36.j". The system tray shows the date and time as "20-06-2023 19:08".

EXPLICIT CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Located at the top left, it displays the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program37.java
C:\Users\Admin\JAVA FULL STACK>java Program37
3.0
3

C:\Users\Admin\JAVA FULL STACK>
```
- Code Editor Window:** Located in the center, it shows Java code for Program37:

```
class Program37{
    public static void main(String[] args){
        float a=3;
        long b;
        b=(long)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```
- Browser Window:** Located at the bottom, it shows a blank page with the URL "http://www.google.com". The status bar at the bottom of the browser window indicates "Ln 5, Col 9".

EXPLICIT CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and a weather widget showing "25°C Mostly cloudy". Below the taskbar, there are two windows open:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program. The command "javac Program38.java" was run, followed by "java Program38", which printed the value "3.0" to the console.
- Code Editor:** An IDE window titled "Program38.java" containing the following Java code:

```
class Program38{  
    public static void main(String[] args){  
        float a=3;  
        float b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```

The bottom of the screen shows another taskbar with the same weather information and system status indicators.

TYPE CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java program. The command `javac Program39.java` was run, followed by `java Program39`, which printed the value `3.0` to the console.
- Code Editor Window:** Displays the Java code for `Program39`. It defines a class with a main method that prints the values of variables `a` and `b` (both initialized to 3) using `System.out.println`.
- Browser Window:** Shows a search results page from Google. The search query was "Java Implicit Casting". The results include links to various Java tutorials and forums.

IMPLICIT CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program. The command `javac Program40.java` was run, followed by `java Program40`, which printed the value "3.0".
- Java Code Editor:** An IDE window titled "Program40.java" containing the following Java code:

```
class Program40{  
    public static void main(String[] args){  
        float a=3;  
        char b;  
        b=(char)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```
- Browser Window:** A Microsoft Edge window showing a search results page for "EXPLICIT CASTING". The URL bar contains "www.google.com/search?q=EXPLICIT+CASTING".

The desktop taskbar at the bottom shows various pinned icons and the date/time as 20-06-2023.

EXPLICIT CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Located at the top, it displays the following text:

```
Microsoft Windows [Version 10.0.22621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program41.java
Program41.java:5: error: incompatible types
b=(boolean)a;
           ^
       required: boolean
          found:   float
1 error

C:\Users\Admin\JAVA FULL STACK>
```
- Code Editor Window:** Located in the center, it shows Java code for Program41:

```
class Program41{
    public static void main(String[] args){
        float a=3;
        boolean b;
        b=(boolean)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```
- Browser Window:** Located at the bottom, it shows a blank page with the URL "http://www.google.com". The status bar at the bottom of the browser window indicates "Ln 4, Col 11".

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. In the center, a Command Prompt window is open, displaying the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program41.java
Program41.java:5: error: incompatible types
b=(boolean)a;
           ^
       required: boolean
       found:    float
1 error

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt, a Java code editor window titled "Program40.java" is visible, containing the following code:

```
class Program40{
public static void main(String[] args){
float a=3;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

At the bottom of the screen, a browser window is open, showing a blank page with the URL "http://www.google.com". The status bar at the bottom of the screen displays "Ln 4, Col 9", "Windows (CRLF)", "UTF-8", and the date/time "20-06-2023 19:38".

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with the following elements:

- Command Prompt Window:** Located at the top left, it displays the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program41.java
C:\Users\Admin\JAVA FULL STACK>java Program41
3.0
3

C:\Users\Admin\JAVA FULL STACK>
```
- Java Code Editor:** Located in the center, showing the code for `Program41.java`. The code performs a type cast from a double variable `a` to a byte variable `b`, and then prints both values.

```
class Program41{
    public static void main(String[] args){
        double a=3;
        byte b;
        b=(byte)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```
- Browser Window:** Located at the bottom, showing a blank page with the URL `http://www.google.com`.

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a code editor window titled "Program42.java" is open, displaying Java code. Above the code editor, a Command Prompt window titled "Command Prompt" is open, showing the output of running the Java program. The command prompt shows the path "C:\Users\Admin\JAVA FULL STACK>" followed by the execution of "javac Program42.java" and "java Program42", which prints the value "3".

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin>JAVA FULL STACK>javac Program42.java
C:\Users\Admin>JAVA FULL STACK>java Program42
3
3

C:\Users\Admin>JAVA FULL STACK>
```

```
class Program42{
public static void main(String[] args){
double a=3;
short b;
b=(short)a;
System.out.println(a);
System.out.println(b);
}
}
```

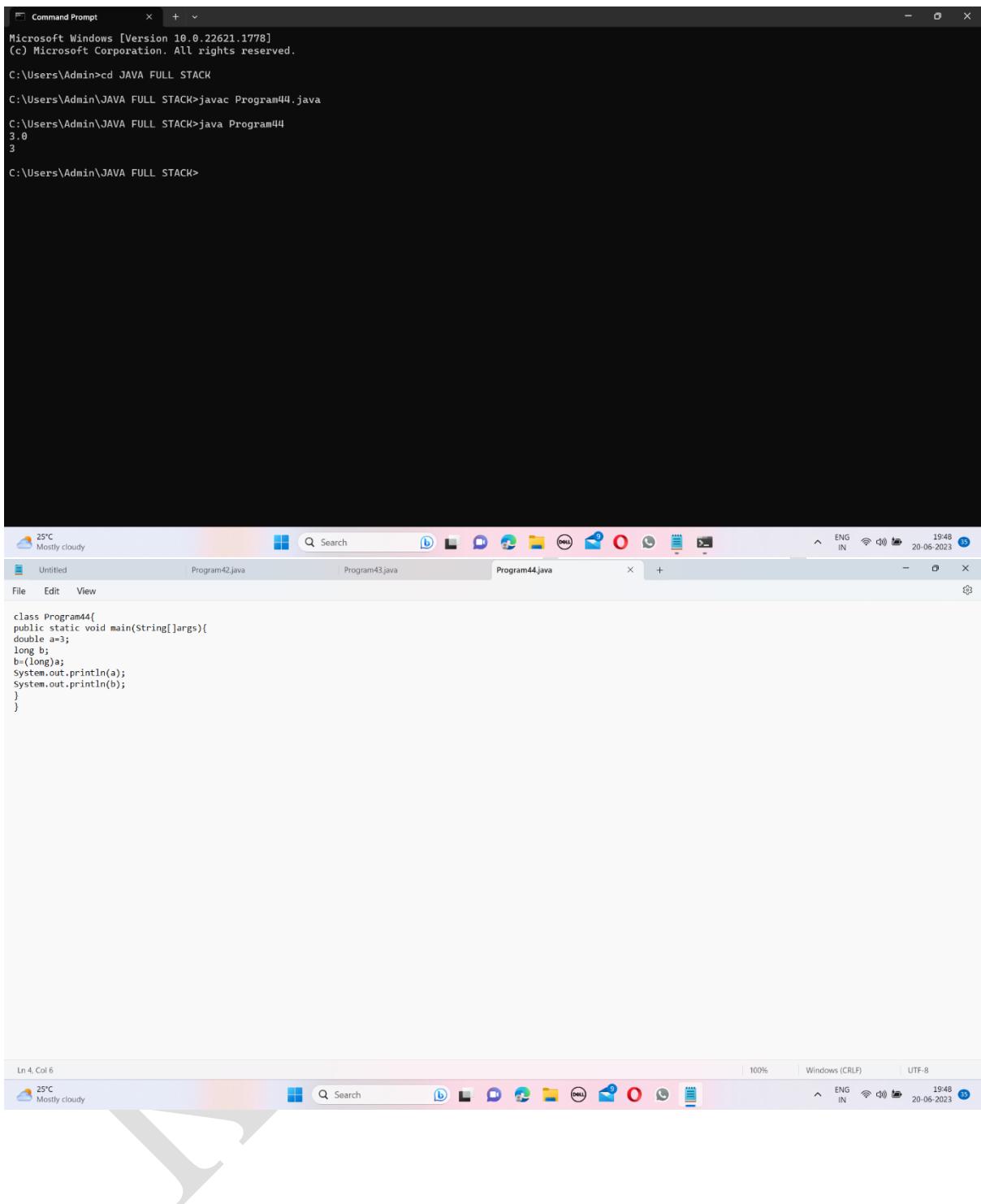
EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with the following elements:

- Command Prompt Window:** Located at the top, showing the output of a Java program. The command `javac Program43.java` was run, followed by `java Program43`, which printed the value `3`.
- Java Code Editor:** A window titled "Program43.java" containing the following Java code:

```
class Program43{  
    public static void main(String[] args){  
        double a=3;  
        int b;  
        b=(int)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```
- Browser Window:** Located at the bottom, showing a search bar and various icons.

EXPLICIT TYPE CASTING



The screenshot shows a Windows desktop environment. At the top is a Command Prompt window titled "Command Prompt". It displays the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program44.java
C:\Users\Admin\JAVA FULL STACK>java Program44
3.0
3

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt is a Java code editor window titled "Program44.java". The code is:class Program44{
public static void main(String[] args){
double a=3;
long b;
b=(long)a;
System.out.println(a);
System.out.println(b);
}
}

The code editor has tabs for "Untitled", "Program42.java", "Program43.java", and "Program44.java". The status bar at the bottom of the code editor shows "Ln 4, Col 6", "100%", "Windows (CRLF)", and "UTF-8".

The taskbar at the bottom of the screen shows several pinned icons, including File Explorer, Mail, and Task View. The system tray shows the date and time as "20-06-2023 19:48".

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a file explorer window is open, showing several Java files: Program42.java, Program43.java, Program44.java, and Program45.java. The Program45.java file is currently selected and displayed in the main pane of the editor. The code in Program45.java is as follows:

```
class Program45{
    public static void main(String[] args){
        double a=3;
        float b;
        b=(float)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

At the bottom of the screen, another taskbar is visible, identical to the one at the top.

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of running a Java program. The command `javac Program46.java` was run, followed by `java Program46`, which printed the value `3.0` to the console.
- Java Code Editor:** Displays the Java code for `Program46`. The code defines a class with a main method that prints the values of variables `a` and `b` (both initialized to 3.0) to the console.
- Browser Window:** Shows a blank page with the URL www.google.com.

TYPE CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. Below the taskbar, a Command Prompt window is open, displaying the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program47.java
C:\Users\Admin\JAVA FULL STACK>java Program47
3.0
^

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt, a code editor window titled "Program47.java" is visible. The code inside is:

```
class Program47{
    public static void main(String[] args){
        double a=3;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The code editor's status bar indicates "Ln 5, Col 9". At the bottom of the screen, another taskbar is visible.

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java compilation command. It displays an error message indicating that incompatible types (boolean and double) cannot be cast from one to the other.
- Java Code Editor Window:** Displays a Java program named Program48.java. The code attempts to assign a double value to a boolean variable and vice versa.
- Browser Window:** Shows a search results page for "TYPE CASTING IS NOT POSSIBLE".

```
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program48.java
Program48.java:5: error: incompatible types
b=a;
      ^
      required: boolean
      found:   double
1 error

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program48{
public static void main(String[] args){
double a=3;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}|
```

Ln 9, Col 2

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. Below the taskbar, there are three windows:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program.
- Java Code Editor:** An IDE window titled "Program49.java" containing Java code. The code defines a class Program49 with a main method that prints the character 'i' and its byte value.
- Browser:** A Microsoft Edge window titled "Program48.java" showing a blank page.

```
class Program49{
public static void main(String[] args){
char a='i';
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with the following elements:

- Command Prompt Window:** Located at the top, showing the output of a Java program. The command `javac Program50.java` was run, followed by `java Program50`, which printed the character 'i' and the short integer value 105.
- Java Code Editor:** A window titled "Program50.java" containing the following Java code:

```
class Program50{  
    public static void main(String[] args){  
        char a='i';  
        short b;  
        b=(short)a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```
- Browser Window:** Located at the bottom, showing a search bar and various icons, with the URL "Windows (CRLF)" visible.

EXPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment. At the top is a taskbar with various icons. Below it is a Command Prompt window titled "Command Prompt" showing Java code execution. In the center is a code editor window titled "Program55.java" containing Java code. Arrows point from the text "TYPE CASTING IS NOT REQUIRED" at the bottom left towards both the Command Prompt and the code editor.

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program51.java
C:\Users\Admin\JAVA FULL STACK>java Program51
i
105

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program55{
public static void main(String[] args){
char a='i';
char b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of running `javac Program56.java`. It displays an error message: "Program56.java:5: error: incompatible types
b=a;
^
required: boolean
found: char
1 error".
- Java Code Editor:** Displays the Java code for `Program56.java`. The code attempts to assign a character value ('a') to a boolean variable (`b`). The code is as follows:

```
class Program56{  
public static void main(String[] args){  
char a='i';  
boolean b;  
b=a;  
System.out.println(a);  
System.out.println(b);  
}  
}
```
- Browser Window:** Shows a blank page with the URL <http://www.google.com>.

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying the following text:

```
Microsoft Windows [Version 10.0.2621.1778]
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C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac program57.java
program57.java:5: error: incompatible types
b=(byte)a;
          ^
required: byte
found:   boolean
1 error

C:\Users\Admin\JAVA FULL STACK>
```

Below the Command Prompt is a Java code editor window titled "Program57.java". The code is as follows:

```
class Program57{
    public static void main(String[] args){
        boolean a=true;
        byte b;
        b=(byte)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

The code editor window also displays the file path "C:\Users\Admin\JAVA FULL STACK\Program57.java" and the current line and column information "Ln 9, Col 2".

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of running `javac Program58.java`. It displays an error message: "Program58.java:5: error: incompatible types
b=a;
^
required: short
found: boolean
1 error".
- Java Code Editor:** Displays the Java code for `Program58`. The code attempts to assign a `boolean` value to a `short` variable.
- Browser Window:** Shows a blank page with the URL <http://www.google.com>.

The desktop taskbar at the bottom shows several open application icons, including File Explorer, Mail, and Task View. The system tray indicates the date as 20-06-2023 and the time as 20:22.

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the command `javac Program59.java` being run, resulting in an error message about incompatible types between boolean and int.
- Java Code Editor:** Displays the Java code for Program59, which attempts to assign a boolean value to an int variable.
- Browser Window:** Shows a blank page with the URL <http://www.google.com>.

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java compilation command. It displays an error message indicating that type casting is not possible from boolean to long.
- Java Code Editor:** Displays a Java program named Program60.java. The code attempts to assign the value of a boolean variable 'a' to a long variable 'b'.
- Browser Window:** Shows a blank page with the URL "http://www.google.com".

```
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program60.java
Program60.java:5: error: incompatible types
b=a;
      ^
       required: long
       found:   boolean
1 error

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program60{
public static void main(String[] args){
boolean a=true;
long b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java compilation command. It displays an error message indicating that type casting is not possible from float to boolean.
- Java Code Editor:** Displays a Java program named Program61.java. The code attempts to assign the value of a float variable 'a' to a boolean variable 'b'.
- Browser Window:** Shows a blank page with the URL "http://www.google.com".

The desktop taskbar at the bottom shows various pinned icons and the date/time as 20-06-2023.

```
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program61.java
Program61.java:5: error: incompatible types
b=a;
      ^
      required: float
      found:   boolean
1 error

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program61{
public static void main(String[] args){
boolean a=true;
float b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT POSSIBLE

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of a Java compilation command. It displays an error message indicating that incompatible types were found when trying to assign a boolean value to a double variable.
- IDE Window:** Shows the source code for a Java program named Program62.java. The code attempts to assign a boolean value to a double variable and prints both values to the console.
- Browser Window:** Shows a blank page with the URL "http://www.google.com".

The desktop taskbar at the bottom shows various pinned icons and the date/time as 20-06-2023.

```
C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program62.java
Program62.java:5: error: incompatible types
b=a;
      ^
 required: double
 found:   boolean
1 error

C:\Users\Admin\JAVA FULL STACK>
```

```
class Program62{
public static void main(String[] args){
boolean a=true;
double b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

TYPE CASTING IS NOT POSSIBLE

Command Prompt

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program63.java
Program63.java:5: error: incompatible types
b=a;
^
 required: char
 found:   boolean
1 error
C:\Users\Admin\JAVA FULL STACK>
```

File Edit View

```
class Program63{
public static void main(String[] args){
boolean a=true;
char b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

Ln 4, Col 6

TYPE CASTING IS NOT POSSIBLE



```
Command Prompt x + 
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program64.java
C:\Users\Admin\JAVA FULL STACK>java Program64
true
true

C:\Users\Admin\JAVA FULL STACK>

24°C Mostly cloudy Search ENG IN 20-06-2023
File Edit View
class Program64{
public static void main(String[]args){
boolean a=true;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}

Ln 4, Col 10 100% Windows (CRLF) UTF-8
24°C Mostly cloudy Search ENG IN 20-06-2023
```

TYPE CASTING IS NOT REQUIRED

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt:** A black terminal window titled "Command Prompt" showing the output of a Java program. The output includes the Java version, the current directory (C:\Users\Admin\JAVA FULL STACK), the compilation command (javac Program52.java), the execution command (java Program52), and the result (105).
- Java Code Editor:** An IDE window titled "Program52.java" containing the following Java code:

```
class Program52{  
    public static void main(String[] args){  
        char a='i';  
        long b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```
- Browser:** A Microsoft Edge window showing a blank page with a "25°C Mostly cloudy" weather forecast.

The taskbar at the bottom of the screen displays several pinned icons and the date/time (20-06-2023, 20:10). The status bar at the bottom right indicates the font size (100%), encoding (Windows (CRLF)), and character set (UTF-8).

IMPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons and system status indicators. Below the taskbar, a Command Prompt window is open, displaying Java code execution. In the center, there is an IDE interface showing multiple Java files in a list view. The bottom part of the screen shows the content area of the IDE, which is currently empty.

```
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program53.java
C:\Users\Admin\JAVA FULL STACK>java Program53
i
105.0

C:\Users\Admin\JAVA FULL STACK>
```

```
25°C
Mostly cloudy
File Edit View
Program47.java Program48.java Program49.java Program50.java Program51.java Program52.java Program53.java
Ln 4, Col 6
Windows (CRLF)
100% UTF-8
ENG IN 20:12 20-06-2023
```

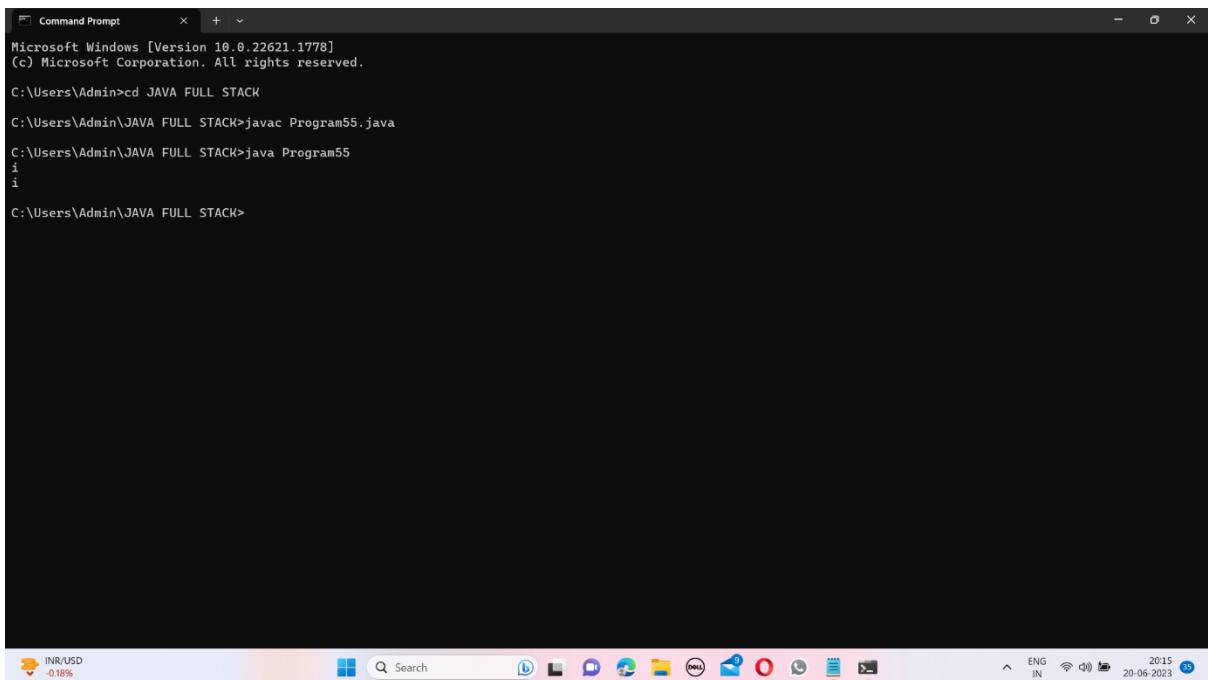
IMPLICIT TYPE CASTING

The screenshot shows a Windows desktop environment with three main windows:

- Command Prompt Window:** Shows the output of running a Java program. The command `javac Program54.java` was run, followed by `java Program54`, which printed the value `105.0` to the console.
- Java Code Editor:** A Notepad-like window titled "Program54.java" containing the following Java code:

```
class Program54{  
    public static void main(String[] args){  
        char a='i';  
        double b;  
        b=a;  
        System.out.println(a);  
        System.out.println(b);  
    }  
}
```
- Browser Window:** A Microsoft Edge window showing a blank page with the URL "http://www.google.com". The status bar at the bottom of the browser window displays the date and time as "20-06-2023".

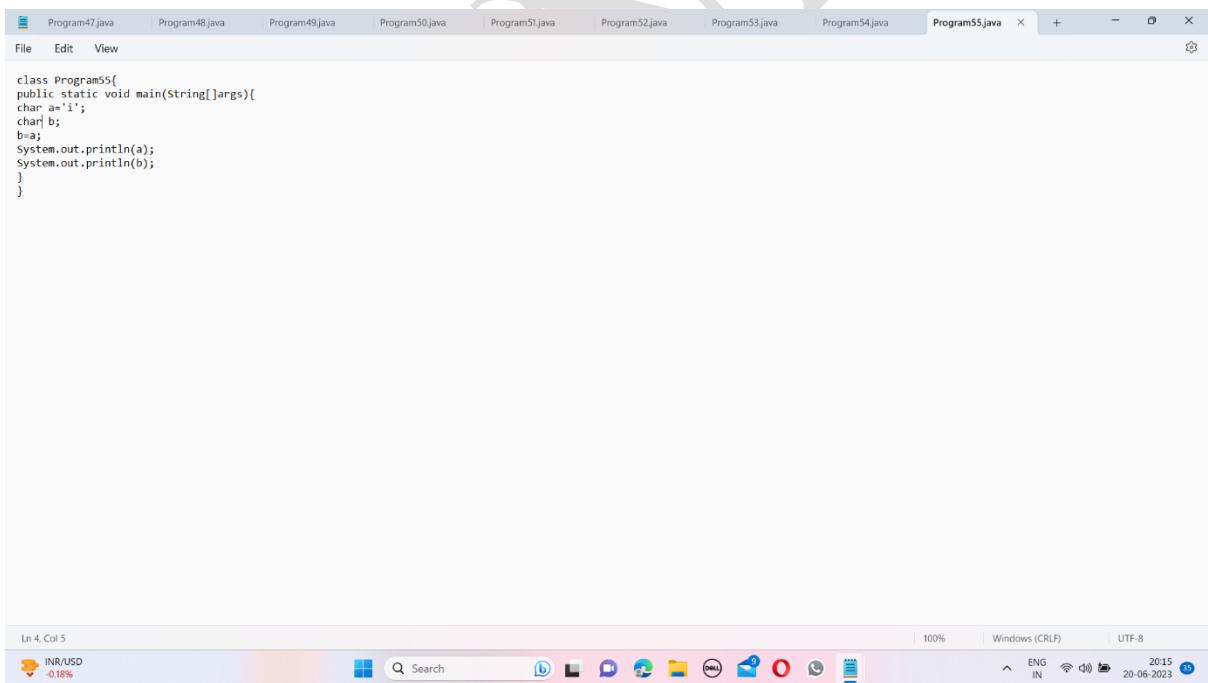
IMPLICIT TYPE CASTING



```
Command Prompt x + 
Microsoft Windows [Version 10.0.2621.1778]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd JAVA FULL STACK
C:\Users\Admin\JAVA FULL STACK>javac Program55.java
C:\Users\Admin\JAVA FULL STACK>java Program55
i
i

C:\Users\Admin\JAVA FULL STACK>
```



```
Program47.java Program48.java Program49.java Program50.java Program51.java Program52.java Program53.java Program54.java Program55.java x + - o x
File Edit View

class Program55{
public static void main(String[] args){
char a='i';
char b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

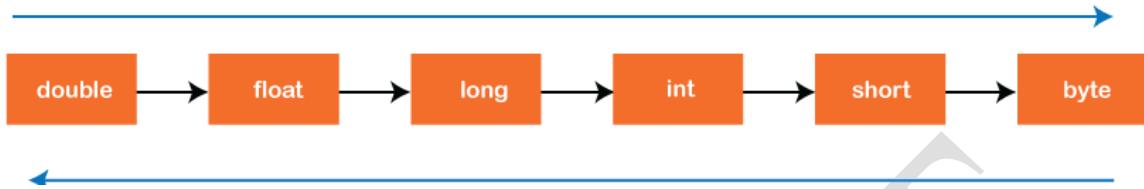
Ln 4, Col 5

TYPE CASTING IS NOT REQUIRED

	byte	short	int	long	float	double	char	boolean
byte	CNR	Yes (im)	Yes(im)	Yes(im)	Yes(im)	Yes(im)	Yes(im)	no
short	Yes(ex)	CNR	Yes(im)	Yes(im)	Yes(im)	Yes(im)	Yes(ex)	no
int	Yes(ex)	Yes(ex)	CNR	Yes(im)	Yes(im)	Yes(im)	Yes(ex)	no
long	Yes(ex)	Yes(ex)	Yes(ex)	CNR	Yes(ex)	Yes(im)	Yes(ex)	no
float	Yes(ex)	Yes(ex)	Yes(ex)	Yes(ex)	CNR	Yes(im)	Yes(ex)	no
double	Yes(ex)	Yes(ex)	Yes(ex)	Yes(ex)	Yes(ex)	CNR	Yes(ex)	no
char	Yes(ex)	Yes(ex)	Yes(im)	Yes(im)	Yes(im)	Yes(im)	CNR	no
boolean	no	no	no	no	no	no	no	CNR

TYPE CASTING IN JAVA:

IMPLICIT TYPE CASTING



IMPLICIT TYPE CASTING: