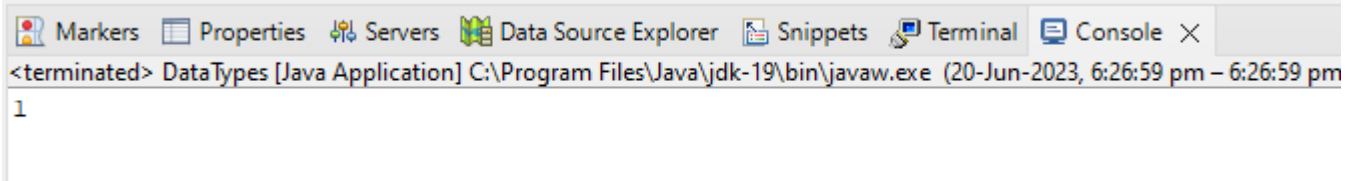# TYPE CASTING IN JAVA

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        char a='1';
        char b;
        b=a;
        System.out.println(b);
    }
}
```
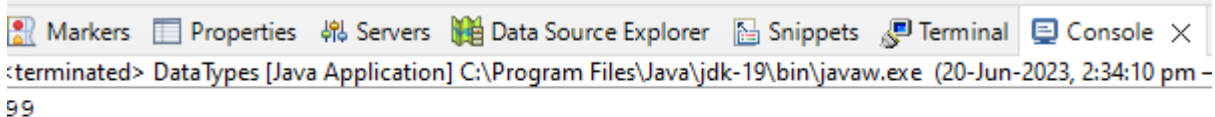
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕

\<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:26:59 pm – 6:26:59 pm

```
1
```

Conclusion: Conversion of data is not required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        char a='c';
        byte b;
        b=(byte)a;
        System.out.println(b);
    }
}
```
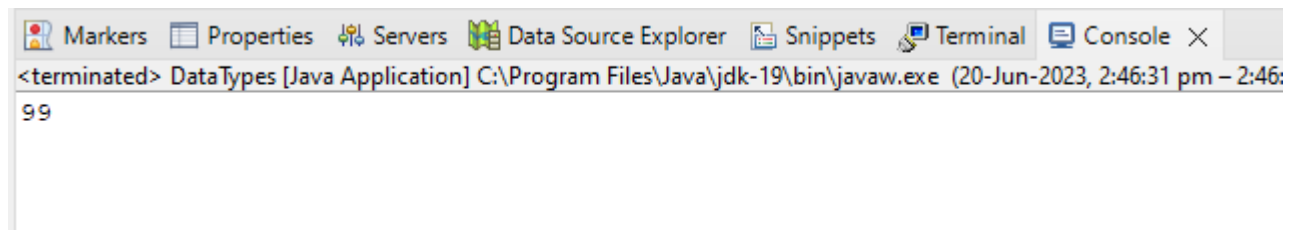
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕

\<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 2:34:10 pm –

```
99
```

Conclusion: Conversion of data from Char data type to byte datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

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

Conclusion: Conversion of data from Char data type to short datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

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


Conclusion: Conversion of data from Char data type to int datatype is possible Implicitly.

```java
package com.assignment;

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


Conclusion: Conversion of data from Char data type to long datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        char a='1';
        float b;
        b=a;
        System.out.println(b);
    }
}
```
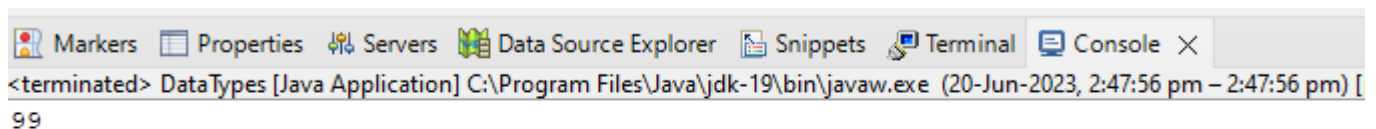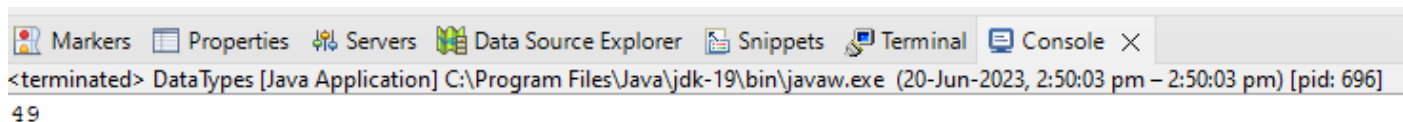
Markers Properties Servers Data Source Explorer Snippets Terminal Console X
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 2:54:30 pm – 2:54:31 pm) [pid
49.0

Conclusion: Conversion of data from Char data type to float datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        char a='1';
        double b;
        b=a;
        System.out.println(b);
    }
}
```
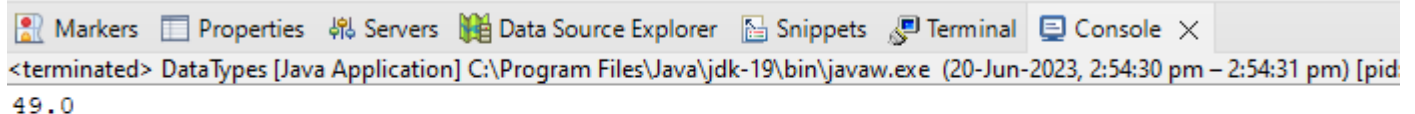
Markers Properties Servers Data Source Explorer Snippets Terminal Console X
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:00:30 pm – 3:00:31 pm) [pid: 14644]
49.0

Conclusion: Conversion of data from Char data type to double datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        char a='1';
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```
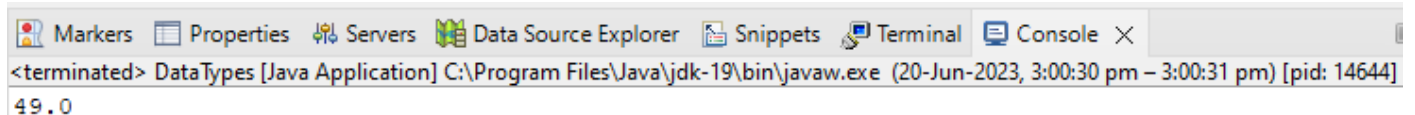
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:42:29 pm – 4:42:29 pm) [pid: 172

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

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```

Conclusion: Conversion of data from Char data type to boolean datatype is not possible

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        char b;
        b=(char)a;
        System.out.println(b);
    }
}
```
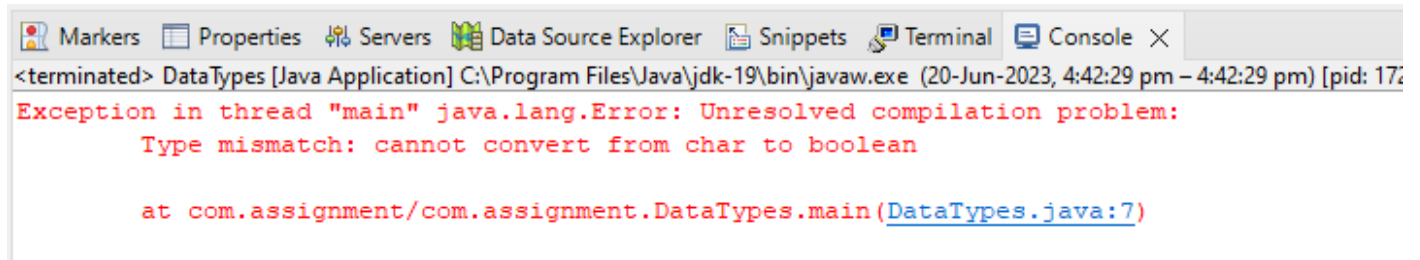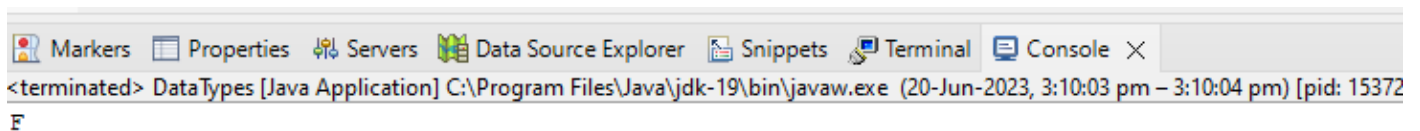
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:10:03 pm – 3:10:04 pm) [pid: 15372

```
F
```

Conclusion: Conversion of data from byte data type to char datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=12;
        byte b;
        b=a;
        System.out.println(b);
    }
}
```

Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:28:37 pm – 6:28:38 pm) [pid: 1

```
12
```

Conclusion: Conversion of data is not required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        short b;
        b=a;
        System.out.println(b);
    }
}
```
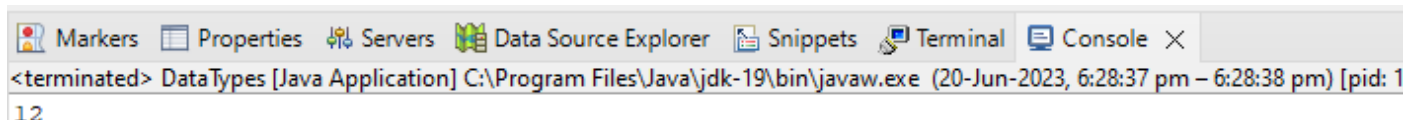
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:12:35 pm – 3:12:36 pm) [
70

Conclusion: Conversion of data from byte data type to short datatype is possible Implicitly.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        int b;
        b=a;
        System.out.println(b);
    }
}
```

Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:18:55 pm – 3:18:55 pm) [pid: 124
70

Conclusion: Conversion of data from byte data type to int datatype is possible Implicitly.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        long b;
        b=a;
        System.out.println(b);
    }
}
```
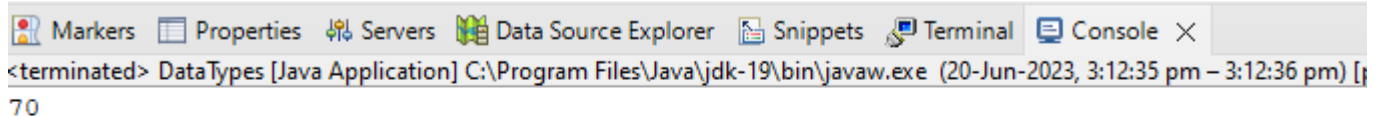
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:21:38 pm – 3:21:39 pm) [pid: 14
70

Conclusion: Conversion of data from byte data type to long datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        float b;
        b=a;
        System.out.println(b);
    }
}
```
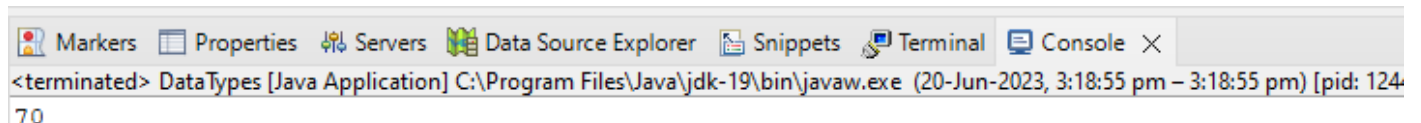
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:25:46 pm – 3:25:46 pm) [pid: 12120]
70.0

Conclusion: Conversion of data from byte data type to float datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=70;
        double b;
        b=a;
        System.out.println(b);
    }
}
```
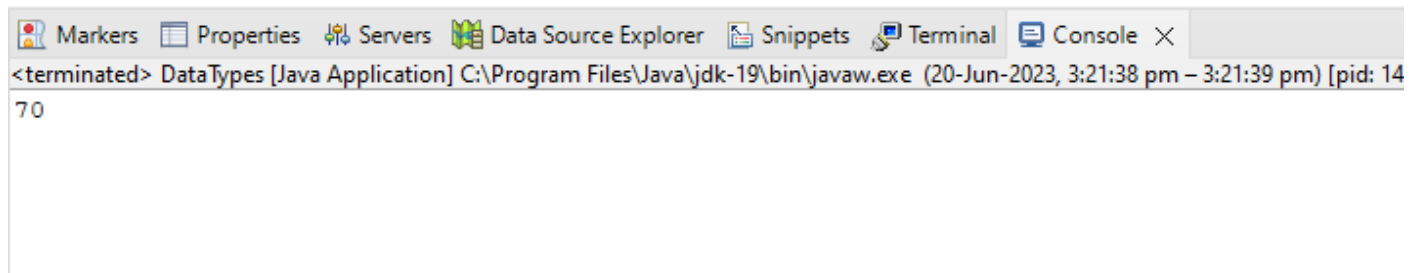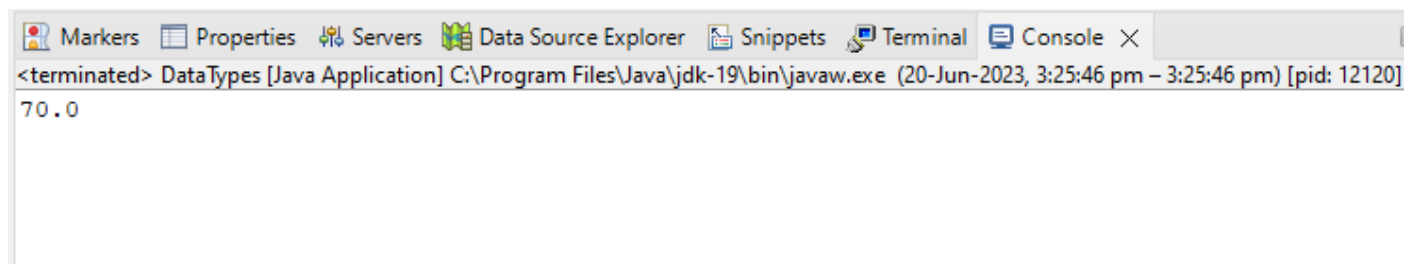
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:30:56 pm – 3:30:57 pm) [
70.0

Conclusion: Conversion of data from byte data type to double datatype is possible Implicitly.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        byte a=18;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```
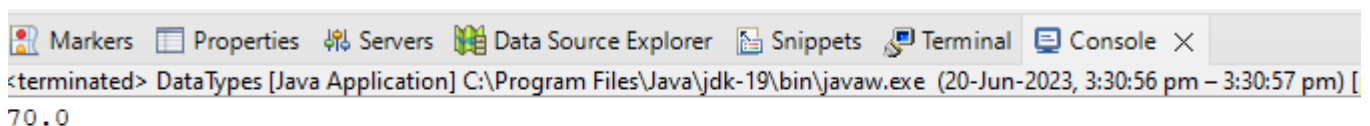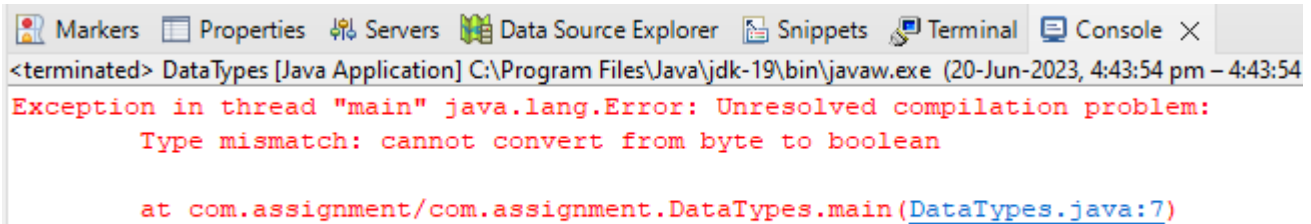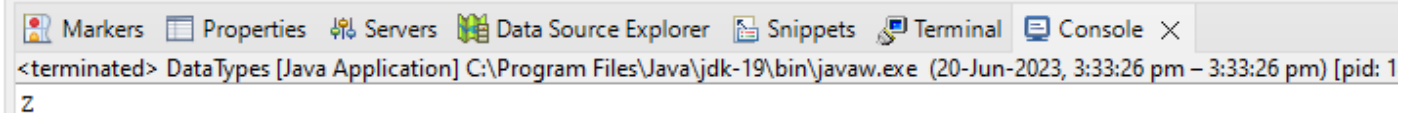
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
```
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:43:54 pm – 4:43:54
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from byte to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```

Conclusion: Conversion of data from byte data type to boolean datatype is not possible.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        char b;
        b=(char) a;
        System.out.println(b);
    }
}
```

Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
```
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:33:26 pm – 3:33:26 pm) [pid: 1
Z
```

Conclusion: Conversion of data from short data type to char datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        byte b;
        b=(byte) a;
        System.out.println(b);
    }
}
```

🛡 Markers 🔲 Properties 🖧 Servers 🗺 Data Source Explorer 🗎 Snippets 🖳 Terminal 🖳 Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:41:48 pm – 3:41:48 pm) [p
90

Conclusion: Conversion of data from short data type to byte datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=12;
        short b;
        b=a;
        System.out.println(b);
    }
}
```

🛡 Markers 🔲 Properties 🖧 Servers 🗺 Data Source Explorer 🗎 Snippets 🖳 Terminal 🖳 Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:29:54 pm – 6:29:54 pm) [pid:
12

Conclusion: Conversion of data is not required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        int b;
        b= a;
        System.out.println(b);
    }
}
```
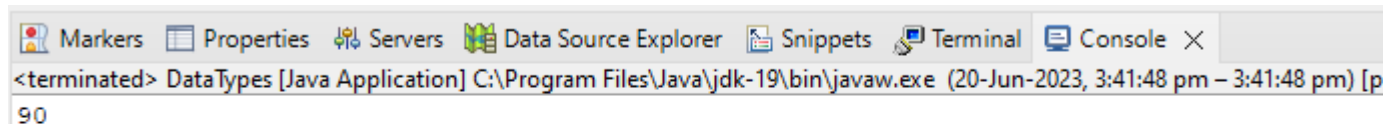
Markers ◼ Properties ⚙ Servers 🗺 Data Source Explorer 📋 Snippets 🖳 Terminal 🖳 Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:43:27 pm – 3:43:27 pm) [pid: 11
90

Conclusion: Conversion of data from short data type to int datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        long b;
        b= a;
        System.out.println(b);
    }
}
```
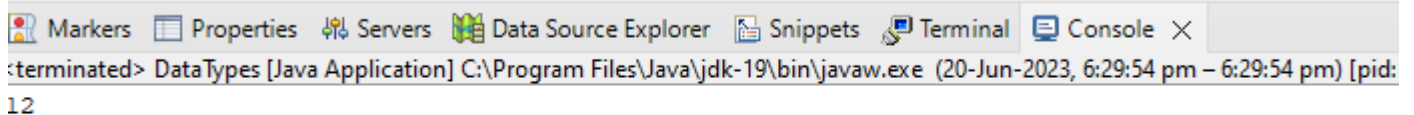
Markers ◼ Properties ⚙ Servers 🗺 Data Source Explorer 📋 Snippets 🖳 Terminal 🖳 Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:45:14 pm – 3:45:14 pm) [pid: 284]
90

Conclusion: Conversion of data from short data type to long datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        float b;
        b= a;
        System.out.println(b);
    }
}
```
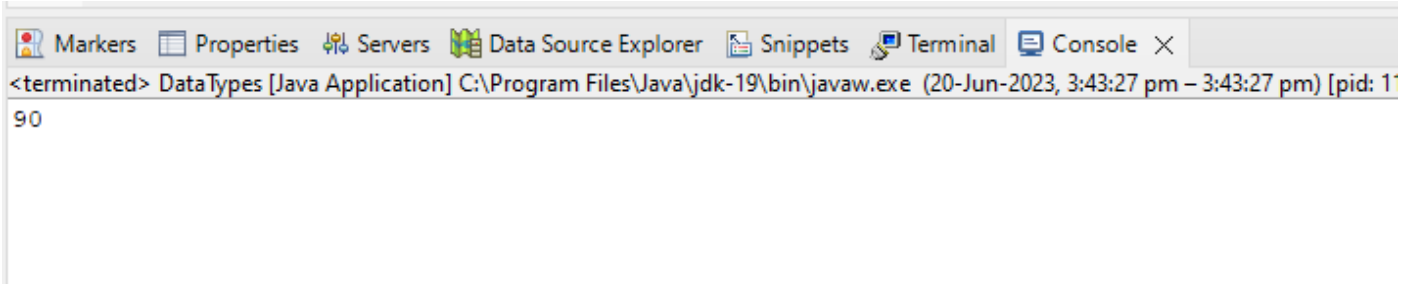
Markers ◼ Properties ⚙ Servers 🗺 Data Source Explorer 📋 Snippets 🖳 Terminal 🖳 Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:47:52 pm – 3:4
90.0

Conclusion: Conversion of data from short data type to float datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=90;
        double b;
        b= a;
        System.out.println(b);
    }
}
```

📇 Markers 🗔 Properties 🔧 Servers 📑 Data Source Explorer 📑 Snippets 🖥 Terminal 🖳 Console ✕
\<terminated\> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:47:52 pm – 3:47:53 pm) [
90.0

Conclusion: Conversion of data from short data type to double datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        short a=18;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```
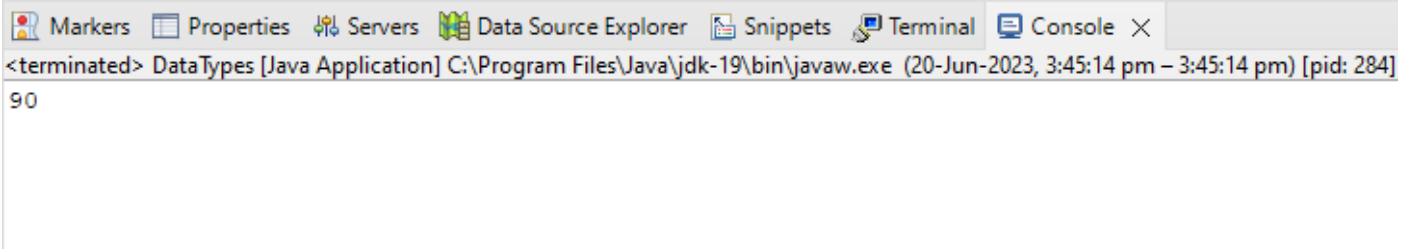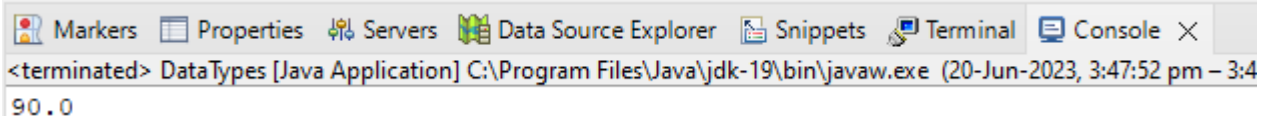
📇 Markers 🗔 Properties 🔧 Servers 📑 Data Source Explorer 📑 Snippets 🖥 Terminal 🖳 Console ✕
\<terminated\> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:44:55 pm – 4:44:55 pm
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from short to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)

Conclusion: Conversion of data from short data type to boolean datatype is not possible.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=129;
        char b;
        b= (char) a;
        System.out.println(b);
    }
}
```

Markers Properties Servers Data Source Explorer Snippets Terminal Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:50:09 pm – 3:50:09 pm) [pid: 88
?

Conclusion: Conversion of data from int data type to char datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=130;
        byte b;
        b= (byte) a;
        System.out.println(b);
    }
}
```
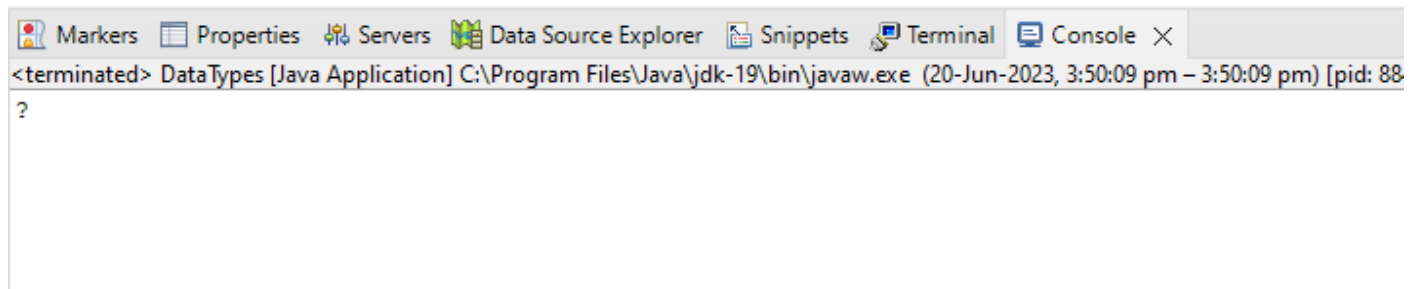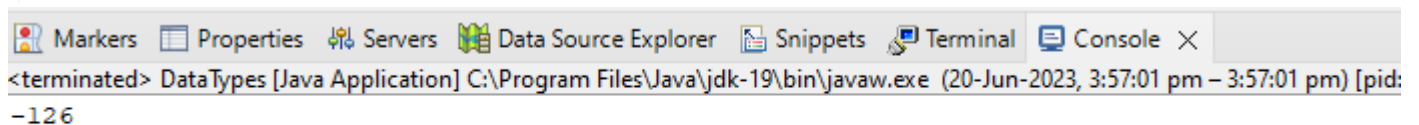
Markers Properties Servers Data Source Explorer Snippets Terminal Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:57:01 pm – 3:57:01 pm) [pid:
-126

Conclusion: Conversion of data from int data type to byte datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=300;
        short b;
        b= (short) a;
        System.out.println(b);
    }
}
```

Markers Properties Servers Data Source Explorer Snippets Terminal Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:58:30 pm – 3:58:30 pm) [pid: 9304
300

Conclusion: Conversion of data from int data type to short datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=12;
        int b;
        b=a;
        System.out.println(b);
    }
}
```

Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:29:54 pm – 6:29:54 pm) [pid
12

Conclusion: Conversion of data is not required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=300;
        long b;
        b=a;
        System.out.println(b);
    }
}
```
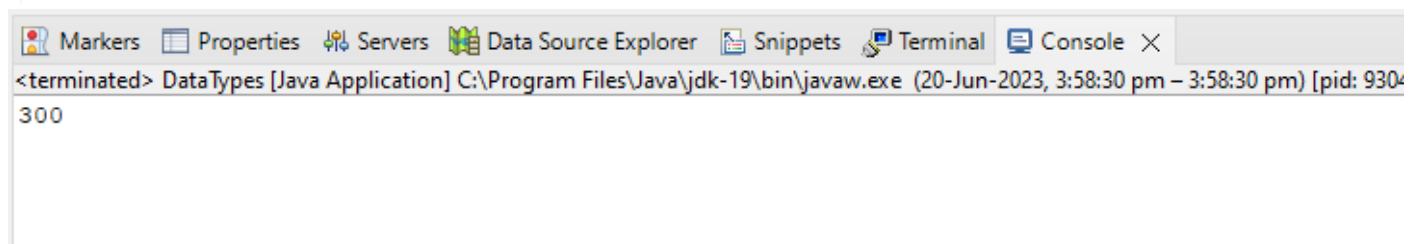
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 3:59:53 pm – 3:59:53 pm) [p
300

Conclusion: Conversion of data from int data type to long datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=300;
        float b;
        b=a;
        System.out.println(b);
    }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:01:00 pm – 4:01:0
300.0
```

Conclusion: Conversion of data from int data type to float datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=300;
        double b;
        b=a;
        System.out.println(b);
    }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:02:14 pm – 4:02:14 pm) [pid:
300.0
```

Conclusion: Conversion of data from int data type to double datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        int a=18;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:46:16 pm – 4:46:17
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from int to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```
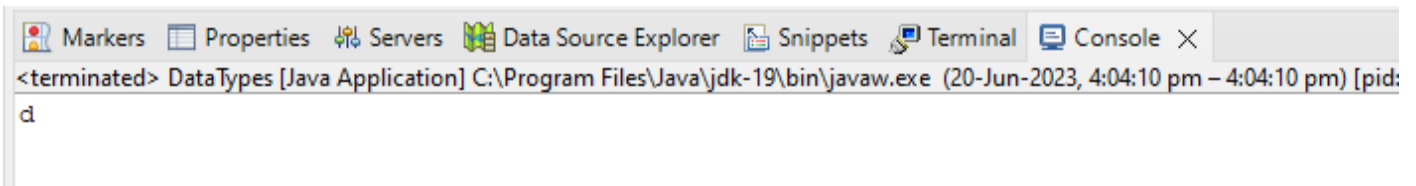
Conclusion: Conversion of data from int data type to boolean datatype is not possible

13

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        char b;
        b=(char) a;
        System.out.println(b);
    }
}
```
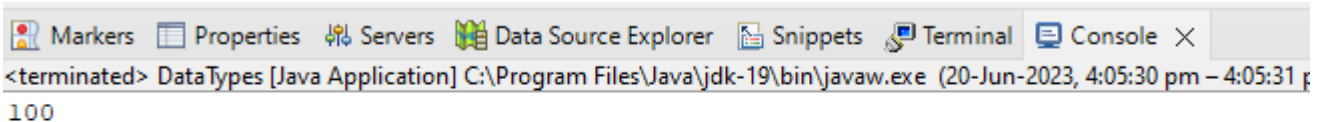
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:04:10 pm – 4:04:10 pm) [pid:
d

Conclusion: Conversion of data from long data type to char datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        byte b;
        b=(byte) a;
        System.out.println(b);
    }
}
```

Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:05:30 pm – 4:05:31 p
100

Conclusion: Conversion of data from long data type to byte datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        short b;
        b= (short) a;
        System.out.println(b);
    }
}
```

Markers | Properties | Servers | Data Source Explorer | Snippets | Terminal | Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:06:42 pm – 4:06:43 pm) [pid:
100

Conclusion: Conversion of data from long data type to short datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        int b;
        b= (int) a;
        System.out.println(b);
    }
}
```
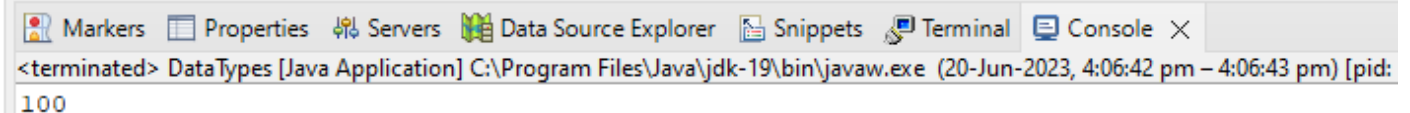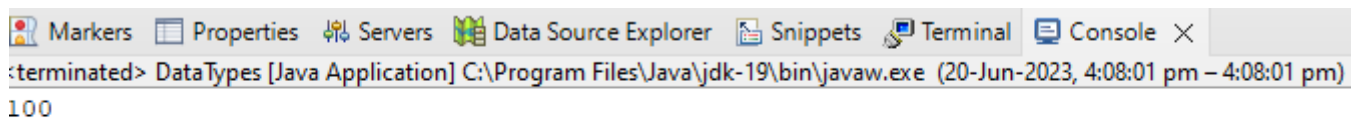
Markers | Properties | Servers | Data Source Explorer | Snippets | Terminal | Console ×
:terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:08:01 pm – 4:08:01 pm)
100

Conclusion: Conversion of data from long data type to int datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=121;
        long b;
        b=a;
        System.out.println(b);
    }
}
```

Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:34:23 pm – 6:34:23 pm) [pi
12

Conclusion: Conversion of data is not required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        float b;
        b=a;
        System.out.println(b);
    }
}
```
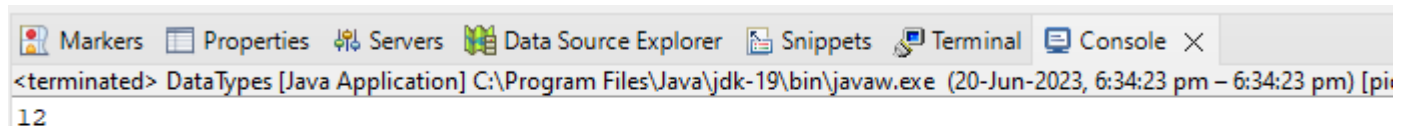
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:09:32 pm – 4:09:32 pm) [
100.0

Conclusion: Conversion of data from long data type to float datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=1001;
        double b;
        b=a;
        System.out.println(b);
    }
}
```
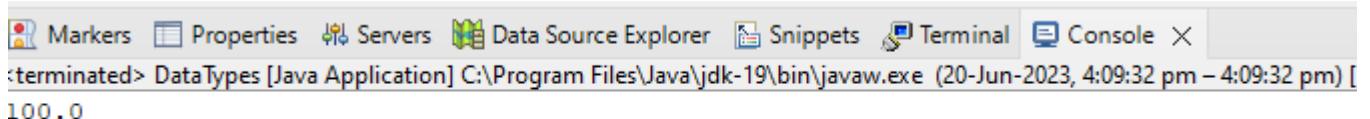
```
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:10:45 pm – 4:10:46 pm) [pi(
100.0
```

Conclusion: Conversion of data from long data type to double datatype is possible Implicitly.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        long a=181;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```
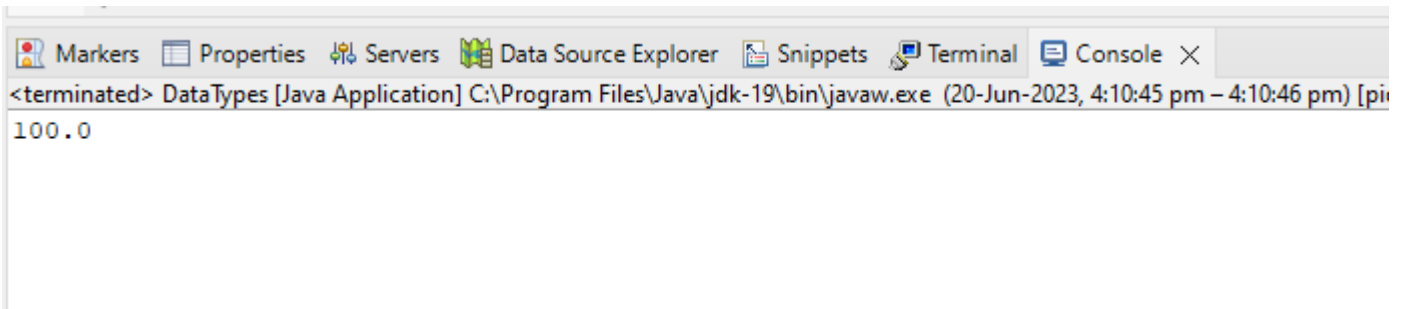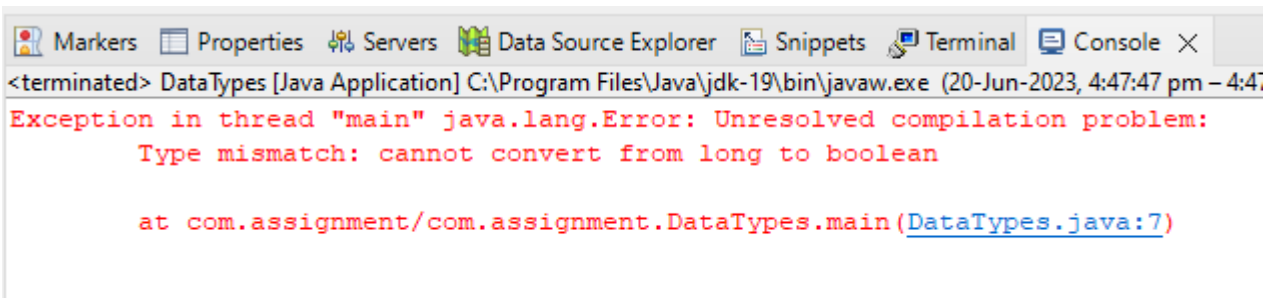
```
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:47:47 pm – 4:47
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from long to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```
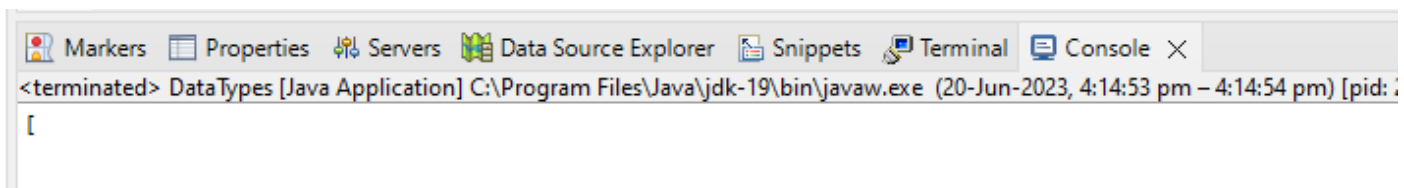
Conclusion: Conversion of data from long data type to boolean datatype is not possible

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        char b;
        b=(char) a;
        System.out.println(b);
    }
}
```

```
Markers   Properties   Servers   Data Source Explorer   Snippets   Terminal   Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:14:53 pm – 4:14:54 pm) [pid:
[
```

Conclusion: Conversion of data from float data type to char datatype is possible but Explicit type conversion is required

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        byte b;
        b=(byte) a;
        System.out.println(b);
    }
}
```

Markers ▢ Properties ⚙ Servers ▨ Data Source Explorer ▨ Snippets ▨ Terminal ▨ Console ✕

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:16:29 pm – 4:16:29 pm) [pid: 1476]

91

Conclusion: Conversion of data from float data type to byte datatype is possible but Explicit type conversion is required

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        short b;
        b=(short) a;
        System.out.println(b);
    }
}
```
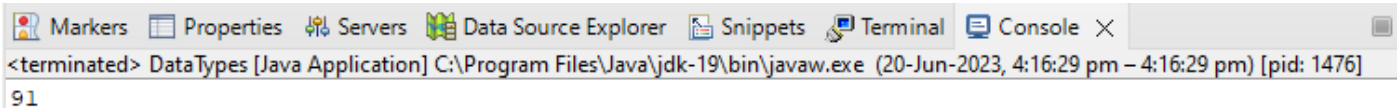
Markers ▢ Properties ⚙ Servers ▨ Data Source Explorer ▨ Snippets ▨ Terminal ▨ Console ✕

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:18:10 pm – 4:18:11 pm)

91

Conclusion: Conversion of data from float data type to short datatype is possible but Explicit type conversion is required

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        int b;
        b= (int) a;
        System.out.println(b);
    }
}
```
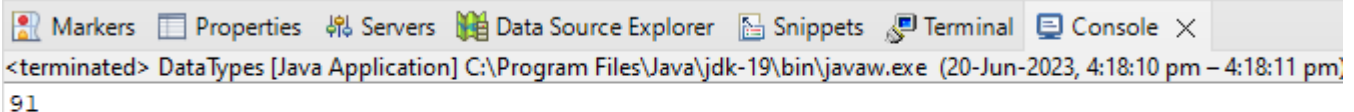
🔍 Markers ▤ Properties ⚙ Servers 🏢 Data Source Explorer 📄 Snippets 🖥 Terminal 🖵 Console ✕

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:19:47 pm – 4:19:47 pm) [pid:

```
91
```

Conclusion: Conversion of data from float data type to int datatype is possible but Explicit type conversion is required

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        long b;
        b= (long) a;
        System.out.println(b);
    }
}
```
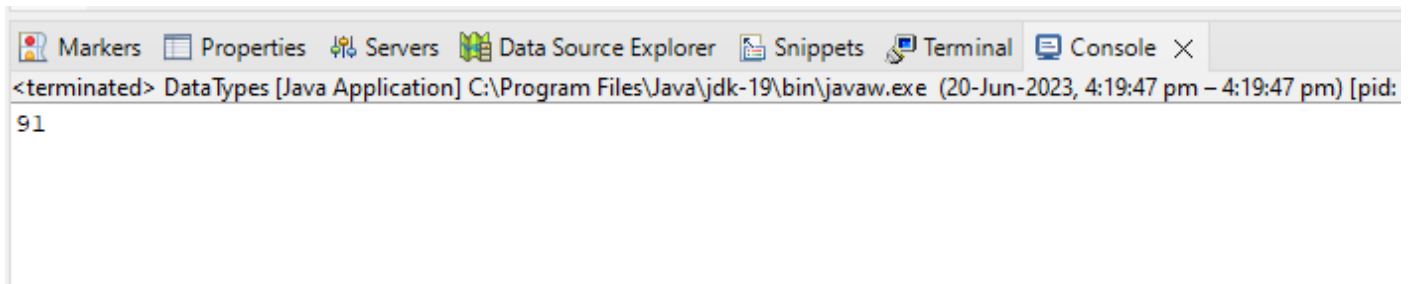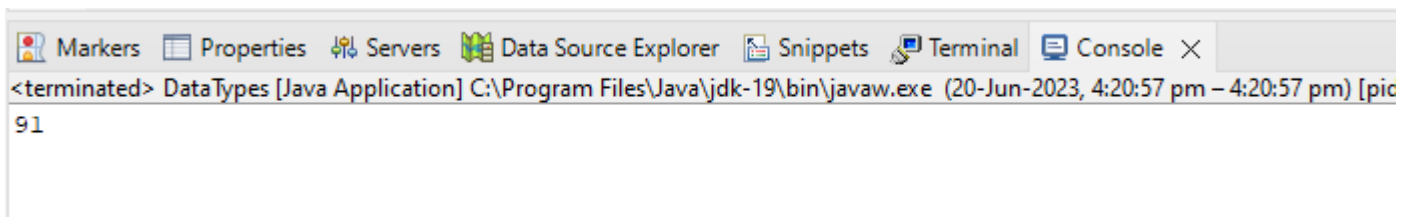
🔍 Markers ▤ Properties ⚙ Servers 🏢 Data Source Explorer 📄 Snippets 🖥 Terminal 🖵 Console ✕

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:20:57 pm – 4:20:57 pm) [pid

```
91
```

Conclusion: Conversion of data from float data type to long datatype is possible but Explicit type conversion is required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=12.123f;
        float b;
        b=a;
        System.out.println(b);
    }
}
```

🔍 Markers ▤ Properties ⚙ Servers 🏢 Data Source Explorer 📄 Snippets 🖥 Terminal 🖵 Console ✕

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 6:35:28 pm – 6:35:29 pm

```
12.123
```

Conclusion: Conversion of data is not required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=91.098f;
        double b;
        b=a;
        System.out.println(b);
    }
}
```
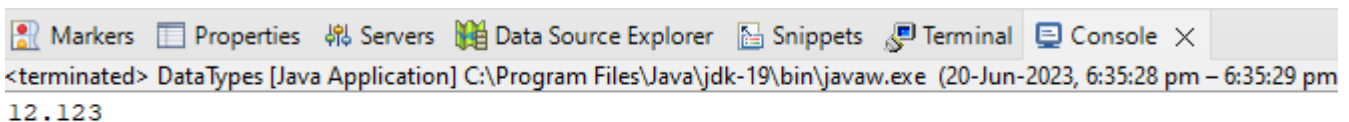
Markers 🔲 Properties 🔧 Servers 📇 Data Source Explorer 🔖 Snippets 🖥 Terminal 🖥 Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:22:12 pm – 4
91.0979995727539

Conclusion: Conversion of data from float data type to double datatype is possible Implicitly.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        float a=18.12f;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```
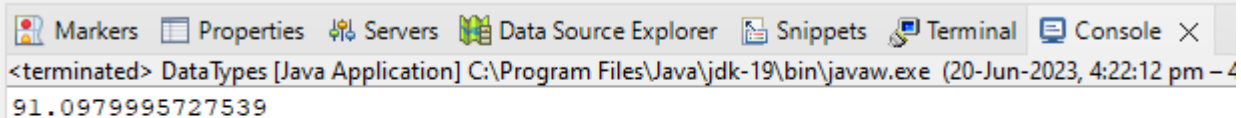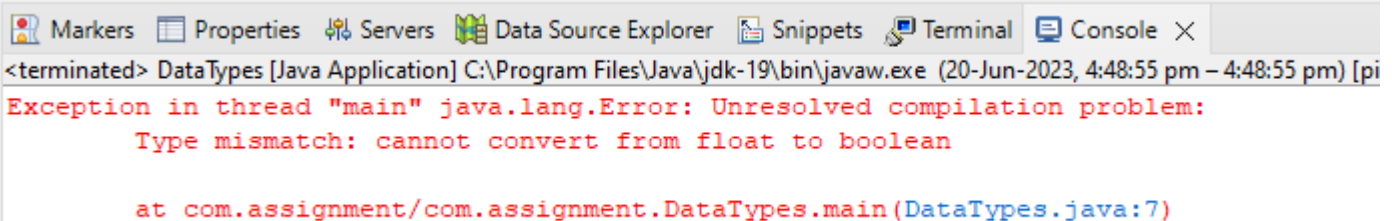
Markers 🔲 Properties 🔧 Servers 📇 Data Source Explorer 🔖 Snippets 🖥 Terminal 🖥 Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:48:55 pm – 4:48:55 pm) [pi
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from float to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)

Conclusion: Conversion of data from float data type to boolean datatype is not possible

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        char b;
        b=(char) a;
        System.out.println(b);
    }
}
```

Markers | Properties | Servers | Data Source Explorer | Snippets | Terminal | Console ×

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:24:06 pm – 4:24:07 pm) [pid: 63

!

Conclusion: Conversion of data from double data type to char datatype is possible but Explicit type conversion is required

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        byte b;
        b=(byte) a;
        System.out.println(b);
    }
}
```

Markers | Properties | Servers | Data Source Explorer | Snippets | Terminal | Console ×

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:25:53 pm – 4:25:54 pm) [p

33

Conclusion: Conversion of data from double data type to byte datatype is possible but Explicit type conversion is required

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        short b;
        b=(short) a;
        System.out.println(b);
    }
}
```

Markers | Properties | Servers | Data Source Explorer | Snippets | Terminal | Console ×

<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:26:58 pm – 4:26:58 pm) [pid: 90

33

Conclusion: Conversion of data from double data type to short datatype is possible but Explicit type conversion is required

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        int b;
        b=(int) a;
        System.out.println(b);
    }
}
```
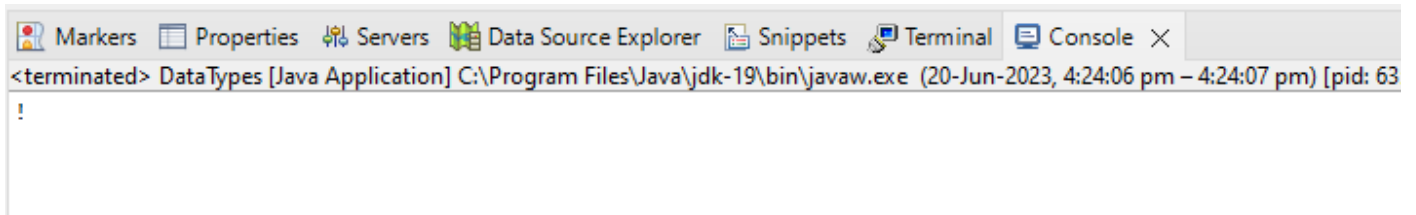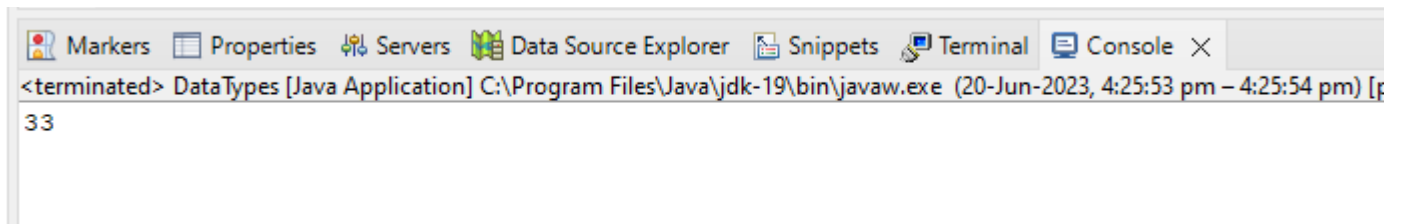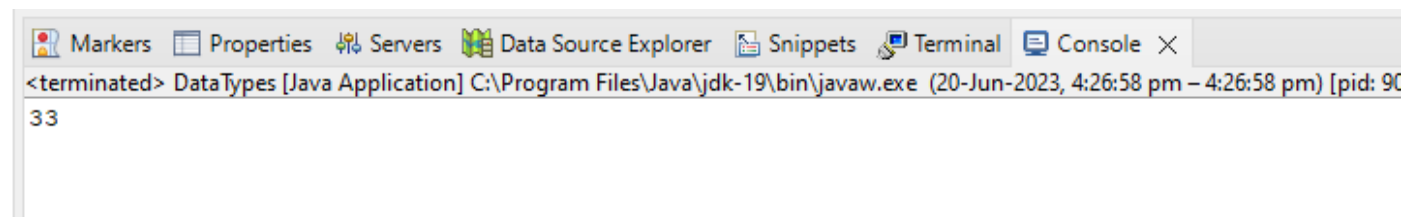
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:28:15 pm – 4:28:15 pm) [pid: 11
33

Conclusion: Conversion of data from double data type to int datatype is possible but Explicit type conversion is required.

```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        long b;
        b=(long) a;
        System.out.println(b);
    }
}
```
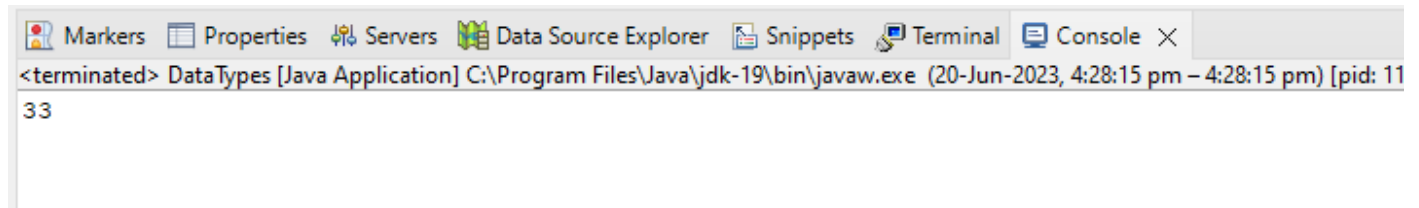
Markers Properties Servers Data Source Explorer Snippets Terminal Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:29:26 pm – 4:29:27 pm) [pid: 77
33

Conclusion: Conversion of data from double data type to long datatype is possible but Explicit type conversion is required.
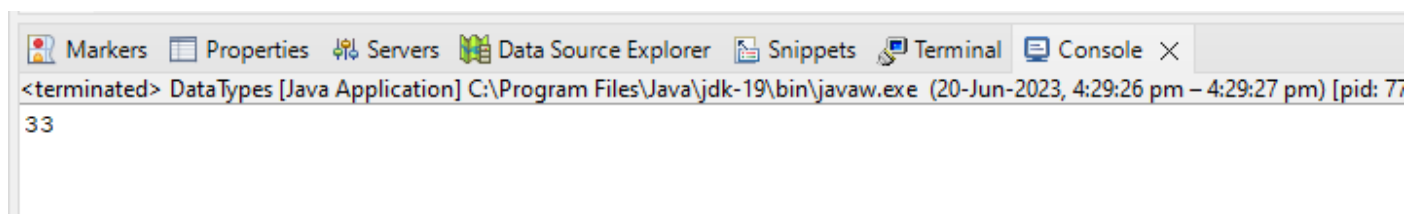
```
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=33.4567890;
        float b;
        b=(float) a;
        System.out.println(b);
    }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 4:31:02 pm – 4:31:02
33.456787
```

Conclusion: Conversion of data from double data type to float datatype is possible but Explicit type conversion is required.
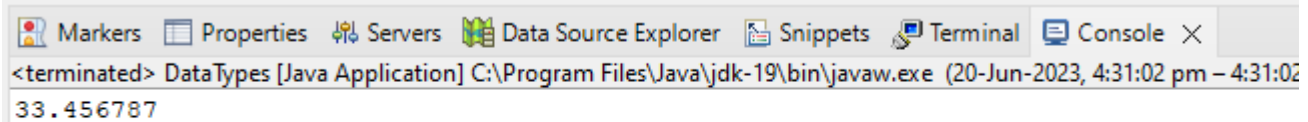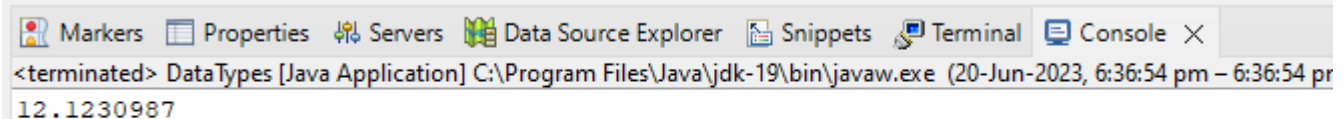
```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=12.1230987;
        double b;
        b=a;
        System.out.println(b);
    }
}
```
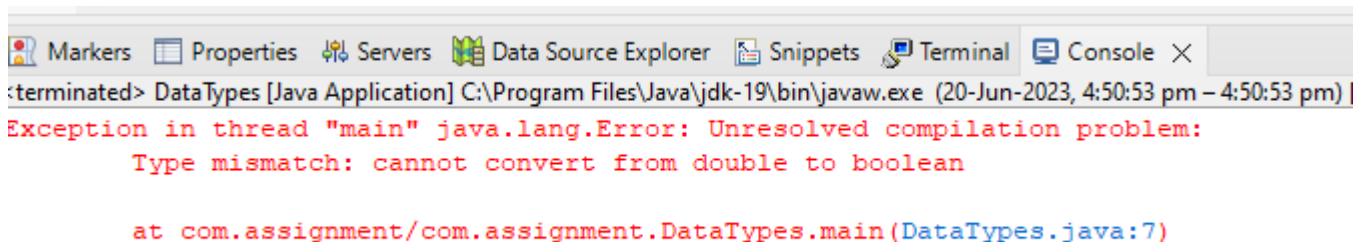
```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 6:36:54 pm – 6:36:54 pr
12.1230987
```

Conclusion: Conversion of data is not required.

```java
package com.assignment;

public class DataTypes {
    public static void main(String[] args) {
        double a=18.12;
        boolean b;
        b=a;
        System.out.println(b);
    }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
:terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 4:50:53 pm – 4:50:53 pm)
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from double to boolean

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```
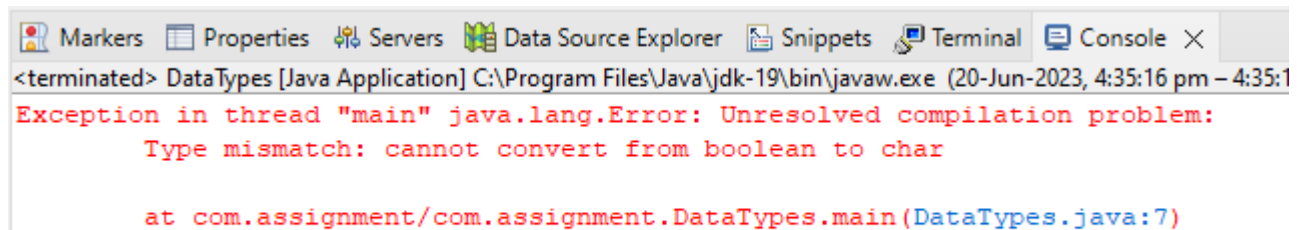
Conclusion: Conversion of data from double data type to boolean datatype is not possible.

```java
package com.assignment;

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

Markers ⬛ Properties 🌐 Servers 📇 Data Source Explorer 📄 Snippets 📟 Terminal 🖥 Console ✕
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:35:16 pm – 4:35:1
```
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to char

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```

Conclusion: Conversion of data from Boolean data type to char data type is not possible.

```java
package com.assignment;

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

Markers ⬛ Properties 🌐 Servers 📇 Data Source Explorer 📄 Snippets 📟 Terminal 🖥 Console ✕
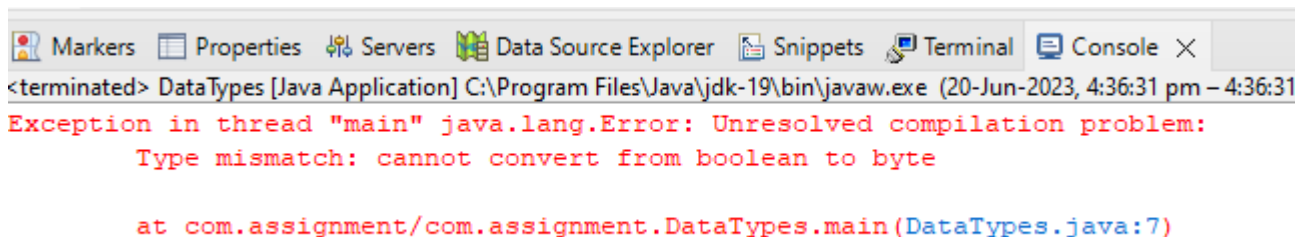<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:36:31 pm – 4:36:31
```
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to byte

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```

Conclusion: Conversion of data from Boolean data type to byte data type is not possible.

```
package com.assignment;

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

Markers Properties Servers Data Source Explorer Snippets Terminal Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:37:24 pm – 4:37:25 pm)
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to short

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)

Conclusion: Conversion of data from Boolean data type to short data type is not possible.

```
package com.assignment;

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

Markers Properties Servers Data Source Explorer Snippets Terminal Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (20-Jun-2023, 4:37:24 pm – 4:37:25 pm) [pid:
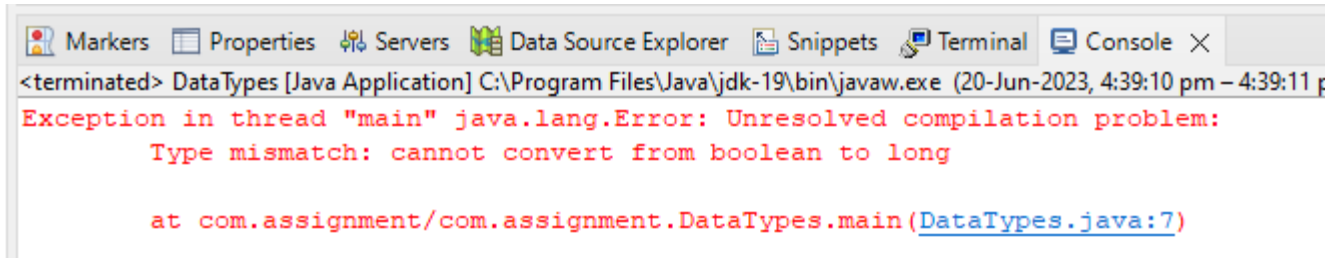Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to short

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)

Conclusion: Conversion of data from Boolean data type to int data type is not possible.

```
package com.assignment;

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

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 4:39:10 pm – 4:39:11 p
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to long

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```
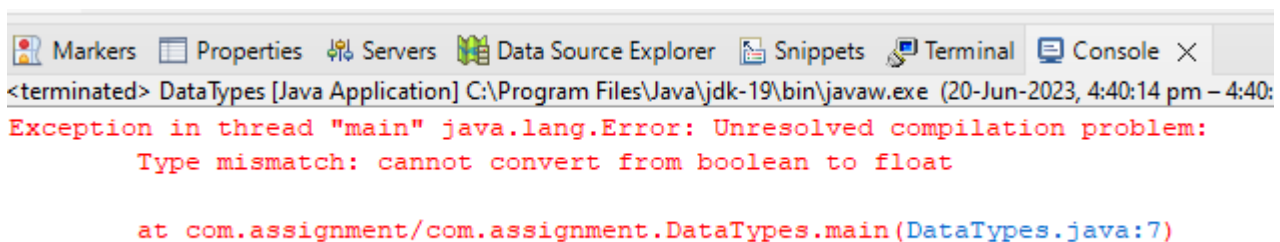
Conclusion: Conversion of data from Boolean data type to long data type is not possible.

```java
package com.assignment;

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

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 4:40:14 pm – 4:40:
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to float

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```

Conclusion: Conversion of data from Boolean data type to float data type is not possible.

```java
package com.assignment;

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

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console ×
<terminated> DataTypes [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (20-Jun-2023, 4:41:08 pm – 4:4
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        Type mismatch: cannot convert from boolean to double

        at com.assignment/com.assignment.DataTypes.main(DataTypes.java:7)
```
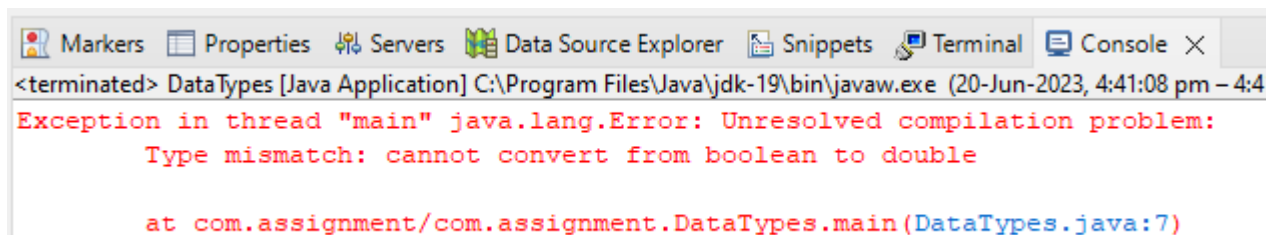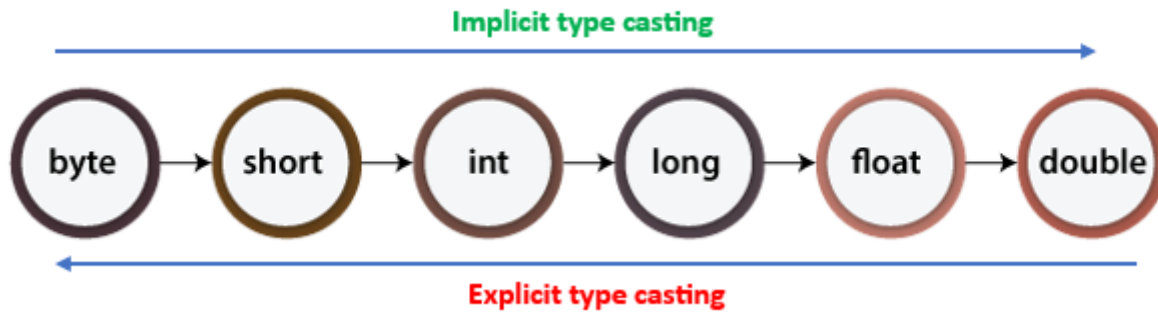
Conclusion: Conversion of data from Boolean data type to float data type is not possible

	Char	Byte	Short	Int	Long	Float	Double	Boolean
char	CNR	✓ E	✓ E	✓ I	✓ I	✓ I	✓ I	X
byte	✓ E	CNR	✓ I	✓ I	✓ I	✓ I	✓ I	X
short	✓ E	✓ E	CNR	✓ I	✓ I	✓ I	✓ I	X
int	✓ E	✓ E	✓ E	CNR	✓ I	✓ I	✓ I	X
long	✓ E	✓ E	✓ E	✓ E	CNR	✓ I	✓ I	X
float	✓ E	✓ E	✓ E	✓ E	✓ E	CNR	✓ I	X
double	✓ E	✓ E	✓ E	✓ E	✓ E	✓ E	CNR	X
boolean	X	X	X	X	X	X	X	CNR

CNR = Casting Not Required

✓   = Casting is Possible.

X   = Casting is not Possible.

E   = Explicit Type Casting

I   = Implicit Type Casting