

Char to byte

Char to short

Char to int

Char to long

Char to float

```
Demojava ×

1
2 public class Demo {
3
4 public static void main(String[] args) {
    // TODO Auto-generated method stub
    char a='$';
    float b;
    b=a;//Implicit type conversion
    System.out.println("a="+a);
    System.out.println("b="+b);

11
12
13 }
14
15 }
16

Console ×
<-terminated> Demo (5) [Java Application] C\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:47:08 pm - 8:47:09 pm)
    a=$
b=36.0
```

Char to double

Char to Boolean

```
D *Demojava ×

1
2 public class Demo {
3
4  public static void main(String[] args) {
    // TODO Auto-generated method stub
    char a='$';
    boolean b;
    b=a;//Error
    System.out.println("a="+a);
    System.out.println("b="+b);

11
12
13  }
14
15 }
16
```

Byte to char

```
2 public class Demo {
         public static void main(String[] args) {
 4●
              // TODO Auto-generated method stub
byte a=42;
char b;
              b=(char)a;//Explicit type conversion
              System.out.println("a="+a);
 11
              System.out.println("b="+b);
 12
 13
         }
 16 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:52:36 pm – 8:52:37 pm)
a=42
b=*
```

Byte to short

```
Demojava ×

1
2 public class Demo {
3
4  public static void main(String[] args) {
    // TODO Auto-generated method stub
    byte a=42;
    short b;
    b=a;//Implicit type conversion
    9     System.out.println("a="+a);
    10     System.out.println("b="+b);

11
12
13   }
14
15 }
16

Console ×

**Console ×

**Cernsinated> Demo (5) [Java Application] C\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:54:11 pm - 8:54:11 pm)
a=42
b=42
```

Byte to int

```
☑ Demo.java ×
  2 public class Demo {
         public static void main(String[] args) {
  40
              // TODO Auto-generated method stub
Ż
              byte a=42; int b;
              b=a;//Implicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
 13
         }
 15 }
 <
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe(20-Jul-2023, 8:54:55 pm – 8:54:56 pm
a=42
b=42
```

Byte to long

```
🛂 Demo.java 🗡
  2 public class Demo {
         public static void main(String[] args) {
  40
<u> 2</u> 5
               // TODO Auto-generated method stub
               byte a=42;
               long b;
              b=a;//Implicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
         }
 13
 15 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:55:24 pm – 8:55:24 pm
a=42
b=42
```

Byte to float

```
☑ Demo.java ×
    public class Demo {
         public static void main(String[] args) {
  40
              // TODO Auto-generated method stub
              byte a=42; float b;
              b=a;//Implicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 13
         }
 15 }
  <
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:55:53 pm – 8:55:53 pm)
a=42
b=42.0
```

Byte to double

```
☑ Demo.java ×
  2 public class Demo {
          public static void main(String[] args) {
                // TODO Auto-generated method stub
                byte a=42;
double b;
                b=a;//Implicit type conversion
System.out.println("a="+a);
                System.out.println("b="+b);
 11
 12
          }
 13
 15 }
■ Console ×
terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 8:56:26 pm – 8:56:27 pm)
a=42
b=42.0
```

Byte to Boolean

Short to char

```
☑ Demo.java ×
  2 public class Demo {
        public static void main(String[] args) {
 40
ā
             // TODO Auto-generated method stub
             short a=42;
             char b;
//b=a;//Error
             b=(char) a;//Explicit type conversion
             System.out.println("a="+a);
             System.out.println("b="+b);
11
12
13
        }
16 }
17
■ Console ×
a=42
b=*
```

Short to byte

```
☑ Demo.java ×
  2 public class Demo {
        public static void main(String[] args) {
 40
            // TODO Auto-generated method stub
Ż
            short a=42;
            byte b;
            b=[byte)a;//Explicit type conversion
            System.out.println("a="+a);
            System.out.println("b="+b);
11
12
13
        }
16 }
 17
■ Console ×
a=42
b=42
```

Short to int

Short to long

```
☑ Demo.java ×
  2 public class Demo {
          public static void main(String[] args) {
    // TODO Auto-generated method stub
  40
                short a=42;
                long b;
                b=a;//Implicit type conversion
                System.out.println("a="+a);
                System.out.println("b="+b);
 11
 12
 13
          }
 15 }
    <
■ Console ×
terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 9:48:36 pm – 9:48:36 pm)
a=42
b=42
```

Short to float

```
☑ Demo.java ×
  2 public class Demo {
        public static void main(String[] args) {
 40
             // TODO Auto-generated method stub
ā
             short a=42;
float b;
             b=a;//Implicit type conversion
             System.out.println("a="+a);
            System.out.println("b="+b);
11
12
13
        }
15 }
   <
■ Console ×
a=42
b=42.0
```

Short to double

Short to Boolean

```
■ *Demo.java ×

 2 public class Demo {
 40
        public static void main(String[] args) {
            // TODO Auto-generated method stub
            short a=42;
            boolean b;
            b=a;//Error
            System.out.println("a="+a);
            System.out.println("b="+b);
10
11
12
13
        }
14
15 }
```

Int to char

```
☑ Demo.java ×
 2 public class Demo {
 40
        public static void main(String[] args) {
            // TODO Auto-generated method stub
            int a=36;
            char b;
            b=(char)a;//Explicit type conversion
            System.out.println("a="+a);
11
            System.out.println("b="+b);
12
13
        }
16 }
■ Console ×
a=36
b=$
```

Int to byte

```
🗾 Demo.java 🗵
  2 public class Demo {
        public static void main(String[] args) {
 40
2 5
             // TODO Auto-generated method stub
             int a=36;
             byte b;
             //b=a;//Error
b=(byte)a;//Explicit type conversion
             System.out.println("a="+a);
             System.out.println("b="+b);
 11
 12
 13
        }
 16 }
 17
■ Console ×
a=36
b=36
```

Int to short

```
☑ Demo.java ×
  2 public class Demo {
         public static void main(String[] args) {
 40
              // TODO Auto-generated method stub
              int a=36;
              short b;
              b=(short)a;//Explicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
11
12
13
         }
16 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 9:55:22 pm – 9:55:23 pm)
a=36
b=36
```

Int to long

```
☑ Demo.java ×
  2 public class Demo {
  40
           public static void main(String[] args) {
                 // TODO Auto-generated method stub
                 int a=36;
                 long b;
b=a;//Implicit type conversion
System.out.println("a="+a);
                 System.out.println("b="+b);
 11
           }
 15 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 9:56:09 pm – 9:56:09 pm
a=36
                                   <terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 9
b=36
```

Int to float

```
☑ Demo.java ×
  2 public class Demo {
         public static void main(String[] args) {
  40
              // TODO Auto-generated method stub
              int a=36;
              float b;
              b=a;//Implicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
         }
 13
 15 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 9:56:41 pm – 9:56:42 pm)
a=36
b=36.0
```

Int to double

```
☑ Demo.java ×
 2 public class Demo {
        public static void main(String[] args) {
 40
a 5
            // TODO Auto-generated method stub
            int a=36;
            double b;
            b=a;//Implicit type conversion
            System.out.println("a="+a);
            System.out.println("b="+b);
11
12
13
        }
14
15 }
■ Console ×
a=36
b=36.0
```

Int to Boolean

```
☑ *Demo.java ×

  2 public class Demo {
        public static void main(String[] args) {
 4●
<u>ā</u> 5
             // TODO Auto-generated method stub
             int a=36;
            boolean b;
            b=a;//Error
            System.out.println("a="+a);
            System.out.println("b="+b);
11
12
        }
13
15 }
```

Long to char

```
🗾 Demo.java 🗵
   2 public class Demo {
             public static void main(String[] args) {
    // TODO Auto-generated method stub
   40
Ż
                    long a=63L;
char b;
                     //b=a;//error
                    b=(char) a;//Explicit type conversion
System.out.println("a="+a);
System.out.println("b="+b);
 12
 13
             }
 16 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:47:49 pm – 10:47:49 p
a=63
b=?
```

Long to byte

```
🗾 Demo.java 🗵
   public class Demo {
        public static void main(String[] args) {
 40
             // TODO Auto-generated method stub
             long a=63L;
byte b;
             //b=a;//error
             b=(byte) a;//Explicit type conversion
            System.out.println("a="+a);
             System.out.println("b="+b);
 11
 12
13
        }
15
16 }
 17
■ Console ×
a=63
b=63
```

Long to short

```
☑ Demo.java ×
  2 public class Demo {
           public static void main(String[] args) {
    // TODO Auto-generated method stub
  40
                long a=63L;
short b;
                b=(short) a;//Explicit type conversion
                System.out.println("a="+a);
 11
                System.out.println("b="+b);
 12
 13
 14
           }
 15
 16 }
 17
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:51:04 pm – 10:51:04 p
a=63
b=63
```

Long to int

Long to float

Long to double

```
☑ Demo.java ×
  2 public class Demo {
 4●
        public static void main(String[] args) {
â
             // TODO Auto-generated method stub
             long a=63L;
double b;
             b=a;//Implicit type conversion
             System.out.println("a="+a);
             System.out.println("b="+b);
 11
 12
13
        }
 15 }
■ Console ×
a=63
b=63.0
```

Long to Boolean

Float to char

```
Demo.java ×
  2 public class Demo {
  40
         public static void main(String[] args) {
              // TODO Auto-generated method stub
              float a=63.0f;
              char b;
              b=(char)a;//Explicit type conversion
              System.out.println("a="+a);
 11
              System.out.println("b="+b);
 12
 13
         }
14
 15
 16 }
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:21:11 pm – 10:21:11 p
a = 63.0
b=?
```

Float to byte

```
☑ Demo.java ×
  2 public class Demo {
  40
           public static void main(String[] args) {
                // TODO Auto-generated method stub float a=63.0f; byte b;
                b=(byte)a;//Explicit type conversion
                System.out.println("a="+a);
System.out.println("b="+b);
 11
 12
           }
 16 }
 17
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:22:19 pm – 10:22:19 pn
a=63.0
b=63
```

Float to short

```
Demo.java ×
  2 public class Demo {
          public static void main(String[] args) {
    // TODO Auto-generated method stub
  40
                float a=63.0f;
short b;
                b=(short)a;//Explicit type conversion
                System.out.println("a="+a);
                System.out.println("b="+b);
 11
 12
 13
 14
           }
 17
     <
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:22:54 pm – 10:22:54 p
a=63.0
b=63
```

Float to int

```
☑ Demo.java ×
  2 public class Demo {
  40
          public static void main(String[] args) {
// TODO Auto-generated method stub
               float a=63.0f;
               int b;
               //b=a;//Error
               b=(int)a;//Explicit type conversion
System.out.println("a="+a);
               System.out.println("b="+b);
 11
          }
 16 }
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:24:55 pm – 10:24:55 pi
a=63.0
b=63
```

Float to long

```
Demo.java ×
  2 public class Demo {
  4●
           public static void main(String[] args) {
                // TODO Auto-generated method stub
Ż
                float a=63.0f;
long b;
//p=a;//Error
b=(long)a;//Explicit type conversion
                System.out.println("a="+a);
System.out.println("b="+b);
 11
 12
 13
           }
 16 }
 17
a=63.0
b=63
```

Float to double

```
☑ Demo.java ×
  2 public class Demo {
  40
         public static void main(String[] args) {
<u>ā</u> 5
              // TODO Auto-generated method stub
              float a=63.0f;
              double b;
              b=a;//Implicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
 13
         }
 14
 15 }
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:28:00 pm – 10:28:00 pn
a=63.0
b = 63.0
```

Float to Boolean

```
🛃 Demo.java 🗵
  2 public class Demo {
        public static void main(String[] args) {
 40
            // TODO Auto-generated method stub
            float a=63.0f;
            boolean b;
            b=a;//Error
            System.out.println("a="+a);
            System.out.println("b="+b);
 11
 12
 13
        }
 14
 15 }
```

Double to char

Double to byte

```
☑ Demo.java ×
  2 public class Demo {
         public static void main(String[] args) {
  40
              // TODO Auto-generated method stub
ā
              double a=63.0;
              byte b;
              b=(byte)a;//Explicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
 13
         }
 15
 16 }
 17
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:32:18 pm – 10:32:18 p
a=63.0
b=63
```

Double to short

Double to int

Double to long

Double to float

```
☑ Demo.java ×
  2 public class Demo {
         public static void main(String[] args) {
  40
              // TODO Auto-generated method stub
              double a=63.0;
              float b;
              b=(|float)a;//Explicit type conversion
              System.out.println("a="+a);
              System.out.println("b="+b);
 11
 12
 13
 14
         }
 15
 16 }
 17
■ Console ×
<terminated> Demo (5) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (20-Jul-2023, 10:36:06 pm – 10:36:06 pr
a = 63.0
b=63.0
```

Double to Boolean

```
🛃 Demo.java 🗴
 2 public class Demo {
        public static void main(String[] args) {
 40
            // TODO Auto-generated method stub
ā 5
            double a=63.0;
            boolean b;
            b=a;//Error
            System.out.println("a="+a);
            System.out.println("b="+b);
10
11
12
13
        }
14
15 }
```

Boolean to char

```
☑ Demo.java ×

  2 public class Demo {
 40
        public static void main(String[] args) {
             // TODO Auto-generated method stub
<u>ā</u> 5
             boolean a=true;
             char b;
<u>a</u> 8
             b=a;//error
             System.out.println("a="+a);
10
             System.out.println("b="+b);
11
 12
13
        }
 14
15 }
```

Boolean to byte

```
🔬 Demo.java 🗵
  2 public class Demo {
 40
        public static void main(String[] args) {
<u>ā</u> 5
             // TODO Auto-generated method stub
             boolean a=true;
byte b;
             b=a;//error
a 8
             System.out.println("a="+a);
             System.out.println("b="+b);
 11
 12
 13
         }
14
15 }
```

Boolean to short

```
🛃 Demo.java 🗵
  2 public class Demo {
        public static void main(String[] args) {
 40
            // TODO Auto-generated method stub
            boolean a=true;
            short b;
· 8
            b=a;//error
            System.out.println("a="+a);
            System.out.println("b="+b);
 11
 12
13
        }
 14
 15 }
```

Boolean to int

```
    Demo.java 

    X

 2 public class Demo {
        public static void main(String[] args) {
 40
            // TODO Auto-generated method stub
a 5
            boolean a=true;
            int b;
            b=a;//error
8
            System.out.println("a="+a);
            System.out.println("b="+b);
10
11
12
        }
13
15 }
```

Boolean to long

```
🛃 Demo.java 🗵
 2 public class Demo {
        public static void main(String[] args) {
  40
<u> 5</u>
            // TODO Auto-generated method stub
            boolean a=true;
            long b;
            b=a;//error
8
            System.out.println("a="+a);
            System.out.println("b="+b);
 10
 11
 12
        }
13
14
15 }
```

Boolean to float

```
    Demo.java ×

 2 public class Demo {
 4●
        public static void main(String[] args) {
            // TODO Auto-generated method stub
2 5
            boolean a=true;
            float b;
a 8
            b=a;//error
            System.out.println("a="+a);
            System.out.println("b="+b);
 11
 12
13
        }
14
15 }
```

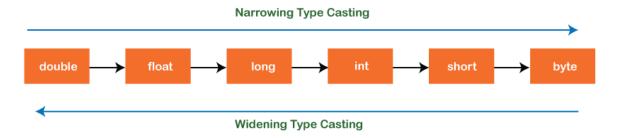
Boolean to double

```
🔬 Demo.java 🗵
  2 public class Demo {
  40
        public static void main(String[] args) {
            // TODO Auto-generated method stub
            boolean a=true;
            double b;
            b=a;//error
            System.out.println("a="+a);
            System.out.println("b="+b);
 11
 12
        }
 13
 14
 15 }
```

TABLE:

CHAR BYTE SHORT INT LONG FLOAT DOUBLE BOOLEAN

CHAR	NCR	√ ETC	√ ETC	√ ITC	√ ITC	√ ITC	√ ITC	×
ВҮТЕ	√ ETC	NCR	√ ITC	√ ITC	√ ITC	√ ITC	√ ITC	×
SHORT	√ ETC	$\sqrt{\text{ETC}}$	NCR	ITC	√ ITC	ITC	√ ITC	×
INT	√ ETC	$\sqrt{\text{ETC}}$	ETC	NCR	ITC	ITC	√ ITC	×
LONG	√ ETC	$\sqrt{\text{ETC}}$	ETC	ETC	NCR	ITC	√ ITC	×
FLOAT	√ ETC	$\sqrt{\text{ETC}}$	ETC	ETC	$\sqrt{\text{ETC}}$	NCR	√ ITC	×
DOUBLE	√ ETC	√ ETC	ETC	√ ETC	√ ETC	ETC	NCR	×
BOOLEAN	×	×	×	×	×	×	×	NCR



Type Casting in Java