TYPECASTING

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

**Command Prompt

Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\palla\zune 2023

C:\Users\palla\zune 2023>javac Typecasting.java

C:\Users\palla\zune 2023>java Typecasting

97

C:\Users\palla\zune 2023>
```

Conclusion: char to byte: Explicit

```
class Typecasting{
  public static void main(String []args){
    char a='1';
    short b;
    b=(short)a;
  System.out.println(b);
}
```

Command Prompt

```
Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\palla>cd june 2023

C:\Users\palla\June 2023>javac Typecasting.java

C:\Users\palla\June 2023>java Typecasting

49

C:\Users\palla\June 2023>
```

Conclusion: char to short: explicit

```
Typecasting - Notepad

File Edit Format View Help

class Typecasting{
  public static void main(String []args){
    char a='1';
  int b;
    b=a;
  System.out.println(b);
  }
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
49
C:\Users\palla\June 2023>
```

Conclusion: char to int: implicit

```
class Typecasting{
  public static void main(String []args){
    char a='1';
  long b;
    b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
49
C:\Users\palla\June 2023>
```

Conclusion: char to long: implicit

```
class Typecasting{
  public static void main(String []args){
    char a='1';
    float b;
    b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
49.0
```

Conclusion: char to float: implicit

```
class Typecasting{
  public static void main(String []args){
    char a='1';
    double b;
    b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
49.0
```

Conclusion: char to double: implicit

```
class Typecasting{
  public static void main(String []args){
    byte a=10;
    char b;
    b=(char)a;

System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
C:\Users\palla\June 2023>
```

Conclusion: byte to char: explicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: byte to short: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: byte to int: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: byte to long: implicit

```
class Typecasting{
  public static void main(String []args){
    byte a=1;
    float b;
    b=a;

System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
```

Conclusion: byte to float: implicit

```
class Typecasting{
  public static void main(String []args){
    byte a=1;
    double b;
    b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
C:\Users\palla\June 2023>
```

Conclusion: byte to double: implicit

```
class Typecasting{
  public static void main(String []args){
    short a=10;
    char b;
    b=(char)a;

System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
```

Conclusion: short to char: explicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: short to byte: explicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: short to int: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: short to long: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10.0
```

Conclusion: short to float: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10.0
```

Conclusion: short to double: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: int to byte: explicit

```
class Typecasting{
  public static void main(String []args){
  int a=10;
  short b;
  b=(short)a;

System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: int to short: explicit

```
class Typecasting{
 public static void main(String []args){
  int a=10;
  long b;
  b=a;
 System.out.println(b);
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C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10
```

Conclusion: int to long: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10.0
```

Conclusion: int to float: implicit

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

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
10.0
```

Conclusion: int to double: implicit

```
class Typecasting{
  public static void main(String []args){
   long a=1;
   byte b;
   b=(byte)a;

System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: long to byte: explicit

```
class Typecasting{
  public static void main(String []args){
  long a=1;
  short b;
  b=(short)a;

System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: long to short: explicit

```
class Typecasting{
  public static void main(String []args){
  long a=1;
  int b;
  b=(int)a;
  System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: long to int: explicit

```
class Typecasting{
  public static void main(String []args){
  long a=1;
  float b;
  b=(float)a;

System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
```

Conclusion: long to float: explicit

```
class Typecasting{
  public static void main(String []args){
  long a=1;
  double b;
  b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
```

Conclusion: long to double: implicit

```
class Typecasting{
  public static void main(String []args){
    float a=1;
    byte b;
    b=(byte)a;
    System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: float to byte: explicit

```
class Typecasting{
  public static void main(String []args){
    float a=1;
    short b;
    b=(short)a;

System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: float to short: explicit

```
class Typecasting{
  public static void main(String []args){
    float a=1;
    int b;
    b=(int)a;
    System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: float to int: explicit

```
class Typecasting{
  public static void main(String []args){
    float a=1;
    double b;
    b=a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
```

Conclusion: float to double: implicit

```
class Typecasting{
  public static void main(String []args){
    double a=1;
    byte b;
    b=(byte)a;

System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: double to byte: explicit

```
class Typecasting{
  public static void main(String []args){
    double a=1;
    short b;
    b=(short)a;

System.out.println(b);
}
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: double to short: explicit

```
class Typecasting{
  public static void main(String []args){
    double a=1;
    int b;
    b=(int)a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

Conclusion: double to int: explicit

```
class Typecasting{
  public static void main(String []args){
   double a=1;
  long b;
   b=(long)a;
  System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1
```

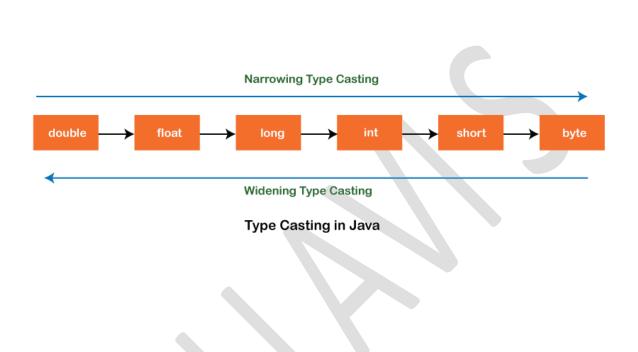
Conclusion: double to long: explicit

```
class Typecasting{
  public static void main(String []args){
    double a=1;
    float b;
    b=(float)a;
    System.out.println(b);
}
```

```
C:\Users\palla\June 2023>javac Typecasting.java
C:\Users\palla\June 2023>java Typecasting
1.0
```

Conclusion: double to float: explicit

FLOW CHART OF IMPLICIT AND EXPLICIT CONVERSION



	С	b	S	i	I	f	d	b
С	CNR	explicit	explicit	implicit	implicit	implicit	implicit	Not possible
b	explicit	CNR	implicit	implicit	implicit	implicit	implicit	Not possible
S	explicit	explicit	CNR	implicit	implicit	implicit	implicit	Not possible
i	Not possible	explicit	explicit	CNR	implicit	implicit	implicit	Not possible
I	Not possible	explicit	explicit	explicit	CNR	explicit	explicit	Not possible
f	Not possible	explicit	explicit	explicit	implicit	CNR	implicit	Not possible
d	Not possible	explicit	explicit	explicit	explicit	explicit	CNR	Not possible
b	Not possible	CNR						