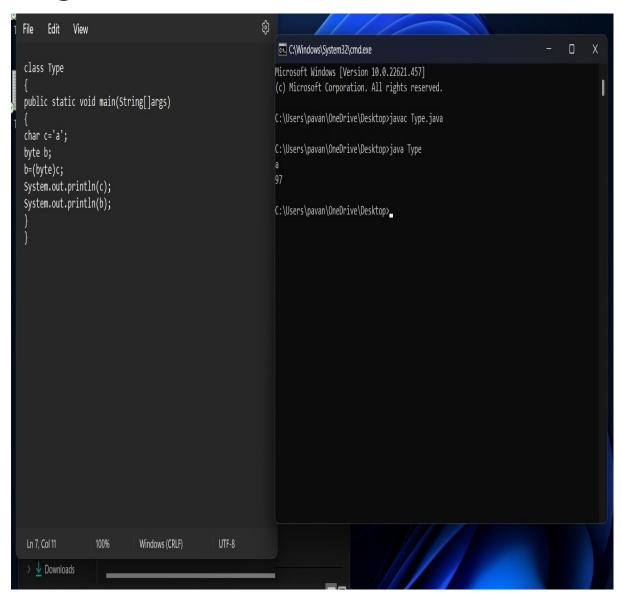
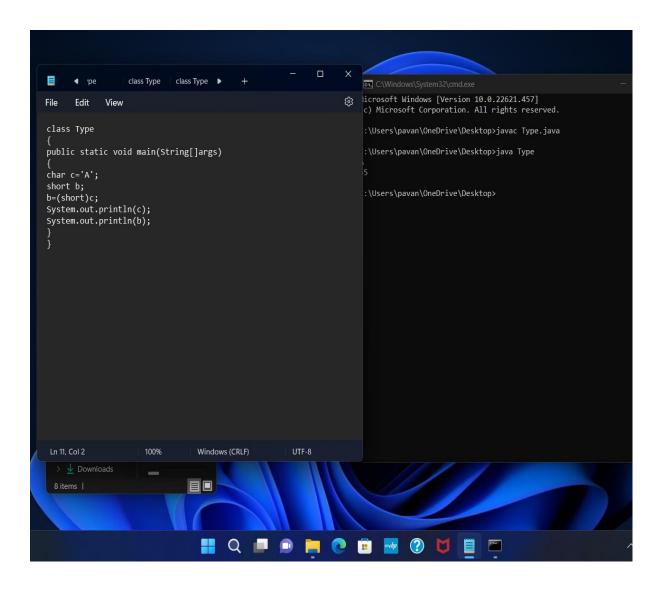
TYPE CASTING

Program:

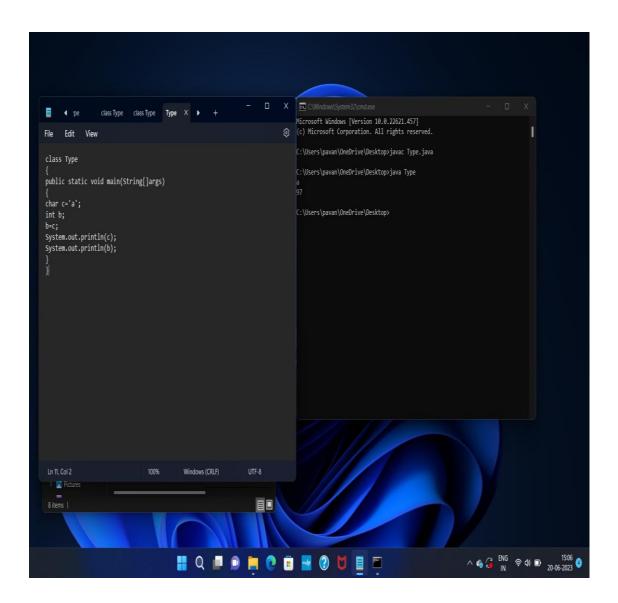


Conclusion: It is possible

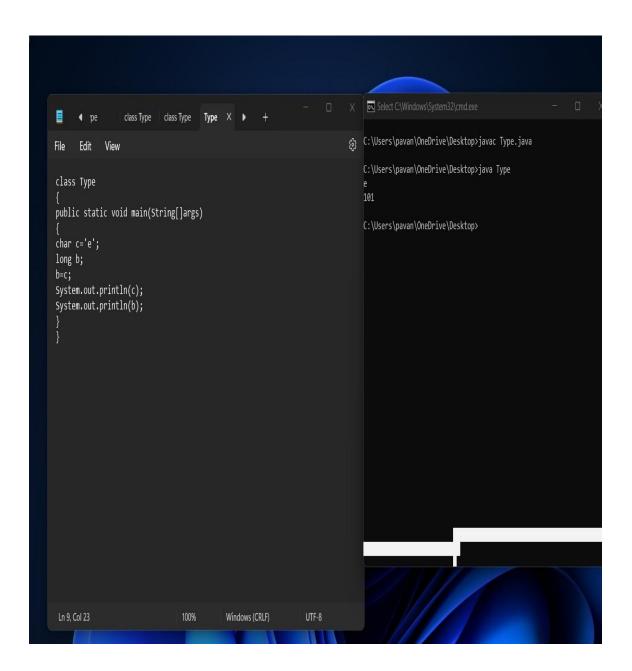
Explicit casting



Conclusion: It is possible



Conclusion: It is possible



Conclusion: It is possible

```
File Edit View

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

```
Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type
e
101.0

C:\Users\pavan\OneDrive\Desktop>__
```

Conclusion: It is possible

```
File Edit View

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

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type

A

65.0

C:\Users\pavan\OneDrive\Desktop>_

C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
class Demo2
{
  public static void main(String[]args)
  {
  char c='a';
  boolean b;
  b=c;
  system.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Demo2.java
Demo2.java:7: error: incompatible types: char cannot be converted to boolean
b=c;
^
```

Conclusion: It is not possible

```
File Edit View

class Type
{
public static void main(String[]args)
{
byte b=97;
char c;
c=(char)b;
System.out.println(b);
System.out.println(c);
}
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type

97

a

C:\Users\pavan\OneDrive\Desktop>

C:\Users\pavan\OneDrive\Desktop>
```

conclusion: It is possible explicit conversion

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
  byte b=97;
  short c;
  c=b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
97
97
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type

97

97

C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible Implicit conversion

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
100
100
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(string[]args)
  {
  byte b=100;
  float c;
  c=b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
File Edit View
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type
100
100.0

C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type

3
3.0

C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.457]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type
3
3.0

C:\Users\pavan\OneDrive\Desktop>javac Type.java

Type.java:7: error: incompatible types: byte cannot be converted to boo c=b;

^
1 error

C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is not possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
    short b=100;
    char c;
    c=(char)b;
    System.out.println(b);
    System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
100
d
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
    short b=101;
    byte c;
    c=(byte)b;
    System.out.println(b);
    System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
Type.java:7: error: incompatible types: possible lossy conversion from short to byte
c=b;
    ^
1 error
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
101
101
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
10
10
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
30
30
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
30
30.0
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
3000
3000.0
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

Conclusion: It is not possible

```
File Edit View

class Type
{
public static void main(String[]args)
{
int b=65;
char c;
c=(char)b;
System.out.println(b);
System.out.println(c);
}
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
65
A
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
65
65
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
108
108
```

Conclusion: It is possible explicit conversion

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
1000
1000
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
  int b=2000;
  float c;
  c=(float)b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type
2000
2000.0

C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
900
900.0
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
  int b=9;
  boolean c;
  c=b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
Type.java:7: error: incompatible types: int cannot be converted to boolean
c=b;
    ^
1 error
```

Conclusion: It is not possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
67
C
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
Type X +

File Edit View

class Type
{
  public static void main(String[]args)
  {
  long b=61;
  byte c;
  c=(byte)b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
61
61
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>java Type
60
60
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
50
50
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
312
312.0
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
Type X +

File Edit View

class Type
{
  public static void main(String[]args)
  {
  long b=3122;
  double c;
  c=(double)b;
  System.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
3122
3122.0
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

Conclusion: It is not possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
97.0
a
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
97.0
97
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
67.3
67
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
  float b=53.30f;
  int c;
  c=(int)b;
  system.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
53.3
53
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
  float b=532.30f;
  long c;
  c=(long)b;
  system.out.println(b);
  System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
532.3
532
C:\Users\pavan\OneDrive\Desktop>_
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type
1232.3
1232.300048828125

C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
    float b=1.30f;
    boolean c;
    c=(boolean)b;
    System.out.println(b);
    System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java

Type.java:7: error: incompatible types: float cannot be converted to boolean

c=(boolean)b;

^
1 error

C:\Users\pavan\OneDrive\Desktop>

8 items |
```

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
    double b=69.30f;
    char c;
    c=(char)b;
    System.out.println(b);
    System.out.println(c);
  }
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
69.30000305175781
E
C:\Users\pavan\OneDrive\Desktop>
8 items
```

Conclusion: It is possible

```
File Edit View

class Type
{
  public static void main(String[]args)
  {
    double b=69.30;
    byte c;
    c=(byte)b;
    System.out.println(b);
    System.out.println(c);
  }
}
```

Conclusion: It is possible

```
File Edit View

class Type
{
public static void main(String[]args)
{
double b=29.30;
short c;
c=(short)b;
System.out.println(b);
System.out.println(c);
}
}
```

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
29.3
29
C:\Users\pavan\OneDrive\Desktop>_
8 items
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
19.3
19
C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java
C:\Users\pavan\OneDrive\Desktop>java Type
70.3
70
C:\Users\pavan\OneDrive\Desktop>
8 items
```

Conclusion: It is possible

```
C:\Users\pavan\OneDrive\Desktop>javac Type.java

C:\Users\pavan\OneDrive\Desktop>java Type

70.3

70.3

C:\Users\pavan\OneDrive\Desktop>
```

Conclusion: It is possible

```
File Edit View

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

```
File Edit View

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

```
File Edit View

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

	char	byte	short	Int	long	Float	double	boolean
char	CNR	√	√	✓	✓	✓	√	×
		Explicit	Explicit	Implicit	Implicit	Implicit	Implicit	Not possible
byte	✓	CNR	✓	✓	✓	✓	✓	×
	Explicit		Implicit	Implicit	Implicit	Implicit	Implicit	Not possible
short	✓	✓	CNR	✓	✓	✓	✓	×
	Explicit	Explicit		Implicit	Implicit	Implicit	Implicit	Not possible
int	✓	✓	✓	CNR	✓	✓	✓	×
	Explicit	Explicit	Explicit		Implicit	Implicit	Implicit	Not possible
long	✓	✓	✓	✓	CNR	✓	✓	×
	Explicit	Explicit	Explicit	Explicit		Implicit	Implicit	Not possible
float	✓	✓	✓	✓	✓	CNR	✓	×
	Explicit	Explicit	Explicit	Explicit	Explicit		Implicit	Not possible
double	✓	✓	✓	✓	✓	✓	CNR	
	Explicit	Explicit	Explicit	Explicit	Explicit	Explicit		Not possible
boolean	×	×	×	×	×	×	×	CNR
	Not							
	possible							