

TYPE CASTING CHART

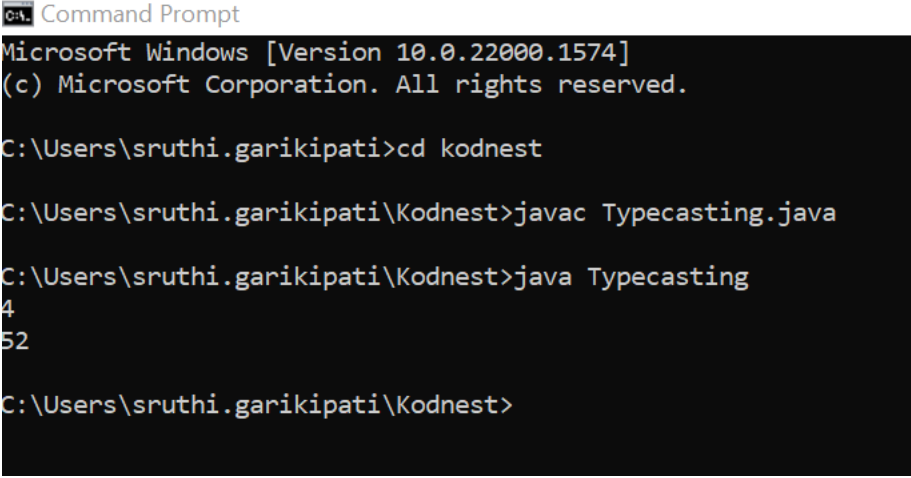
Program 1 : Char to Char

Casting Not Required. Because same Datatypes.

Program 2 : Char to byte

```
class Typecasting
{
public static void main (String[]args)
{
char a = '4' ;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT :



```
C:\> Command Prompt
Microsoft Windows [Version 10.0.22000.1574]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sruthi.garikipati>cd kodnest

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to byte conversion is Explicit Type Casting.

Program 3: Char to Short

```
class Typecasting
{
    public static void main (String[]args)
    {
        char a = '4' ;
        short b;
        b= (short)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: possible lossy conversion from char to short
    b= a;
       ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to Short conversion is Explicit Type Casting.

Program 4: Char to int

```
class Typecasting
{
    public static void main (String[] args)
    {
        char a = '4' ;
        int b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to int conversion is Implicit Type Casting.

Program 5 : Char to long

```
class Typecasting
{
    public static void main (String[] args)
    {
        char a = '4';
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to long conversion is Implicit Type Casting.

Program 6 : Char to float

```
class Typecasting
{
public static void main (String[]args)
{
char a = '4' ;
float b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to float conversion is Implicit Type Casting.

Program 7 : Char to Double

```
class Typecasting
{
    public static void main (String[] args)
    {
        char a = '4' ;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4
52.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Char to Double conversion is Implicit Type Casting.

Program 8: Char to Boolean

```
class Typecasting
{
public static void main (String[]args)
{
char a = '4' ;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[]args)
{
char a = '4' ;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: char cannot be converted to boolean
b=a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: char cannot be converted to boolean
b=(boolean)a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>
```

Program 9: byte to char

```
class Typecasting
{
    public static void main (String[] args)
    {
        byte a = 60 ;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
<
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to char conversion is Implicit Type Casting.

Program 10: byte to byte

Casting Not Required. Because same Datatypes.

Program 11: byte to short

```
class Typecasting
{
    public static void main (String[] args)
    {
        byte a = 60 ;
        short b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to short conversion is Implicit Type Casting.

Program 12: byte to int

```
class Typecasting
{
    public static void main (String[] args)
    {
        byte a = 60 ;
        int b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to int conversion is Implicit Type Casting.

Program 13 : byte to long

```
class Typecasting
{
    public static void main (String[] args)
    {
        byte a = 60 ;
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to long conversion is Implicit Type Casting.

Program 14: byte to float

```
class Typecasting
{
    public static void main (String[]args)
    {
        byte a = 60 ;
        float b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to float conversion is Implicit Type Casting.

Program 15: byte to double

```
class Typecasting
{
    public static void main (String[] args)
    {
        byte a = 60 ;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

byte to double conversion is Implicit Type Casting.

Program 16: byte to boolean

```
class Typecasting
{
public static void main (String[] args)
{
byte a = 60 ;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[] args)
{
byte a = 60 ;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: byte cannot be converted to boolean
b=a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: byte cannot be converted to boolean
b=(boolean)a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>
```

Program 17 : short to char

```
class Typecasting
{
    public static void main (String[]args)
    {
        short a = 60;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
<

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to char conversion is Explicit Type Casting.

Program 18 : short to byte

```
class Typecasting
{
public static void main (String[] args)
{
short a = 60;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to byte conversion is Explicit Type Casting.

Program 19 : short to short

Casting Not Required. Because same Datatypes.

Program 20 : short to int

```
class Typecasting
{
    public static void main (String[]args)
    {
        short a = 60;
        int b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to int conversion is implicit Type Casting.

Program 21: short to long

```
class Typecasting
{
    public static void main (String[] args)
    {
        short a = 60;
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to long conversion is implicit Type Casting.

Program 22 : short to float

```
class Typecasting
{
    public static void main (String[] args)
    {
        short a = 60;
        float b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to float conversion is implicit Type Casting.

Program 23 : short to Double

```
class Typecasting
{
    public static void main (String[] args)
    {
        short a = 60;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
60
60.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

short to double conversion is implicit Type Casting.

Program 24 : short to boolean

```
class Typecasting
{
public static void main (String[]args)
{
short a = 60;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[]args)
{
short a = 60;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>java Typecasting.java
Typecasting.java:7: error: incompatible types: short cannot be converted to boolean
b=a;
  ^
1 error
error: compilation failed

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: short cannot be converted to boolean
b=(boolean)a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>
```

Program 25 : int to char

```
class Typecasting
{
    public static void main (String[] args)
    {
        int a = 26;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
→
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to char conversion is Explicit Type Casting.

Program 26 : int to byte

```
class Typecasting
{
    public static void main (String[] args)
    {
        int a = 26;
        byte b;
        b=(byte)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
26

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to byte conversion is Explicit Type Casting.

Program 27: int to short

```
class Typecasting
{
    public static void main (String[] args)
    {
        int a = 26;
        short b;
        b=(short)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
26

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to short conversion is Explicit Type Casting.

Program 28: int to int

Casting Not Required. Because same Datatypes.

Program 29: int to long

```
class Typecasting
{
    public static void main (String[] args)
    {
        int a = 26;
        long b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
26
C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to long conversion is implicit Type Casting.

Program 30: int to float

```
class Typecasting
{
public static void main (String[] args)
{
int a = 26;
float b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
26.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to float conversion is implicit Type Casting.

Program 31: int to double

```
class Typecasting
{
    public static void main (String[] args)
    {
        int a = 26;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
26
26.0

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

int to double conversion is implicit Type Casting.

Program 32: int to boolean

```
class Typecasting
{
public static void main (String[] args)
{
int a = 26;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[] args)
{
int a = 26;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: int cannot be converted to boolean
b=a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: int cannot be converted to boolean
b=(boolean)a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>
```

Program 33: long to char

```
class Typecasting
{
public static void main (String[] args)
{
long a = 213567892l;
char b;
b=(char)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
?

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to char conversion is Explicit Type Casting.

Program 34: long to byte

```
class Typecasting
{
    public static void main (String[] args)
    {
        long a = 213567892l;
        byte b;
        b=(byte)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
-108

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to byte conversion is Explicit Type Casting.

Program 35: long to short

```
class Typecasting
{
    public static void main (String[] args)
    {
        long a = 213567892l;
        short b;
        b=(short)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
-13932

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to short conversion is Explicit Type Casting.

Program 36: long to int

```
class Typecasting
{
public static void main (String[] args)
{
long a = 213567892l;
int b;
b=(int)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
213567892

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to int conversion is Explicit Type Casting.

Program 37: long to long

Casting Not Required. Because same Datatypes.

Program 38: long to float

```
class Typecasting
{
    public static void main (String[] args)
    {
        long a = 213567892l;
        float b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
2.13567888E8

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to float conversion is Implicit Type Casting.

Program 39: long to double

```
class Typecasting
{
    public static void main (String[] args)
    {
        long a = 2135678921;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
213567892
2.13567888E8

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

Long to double conversion is Implicit Type Casting.

Program 40: long to boolean

```
class Typecasting
{
public static void main (String[]args)
{
long a = 213567892l;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[]args)
{
long a = 213567892l;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: long cannot be converted to boolean
b=a;
  ^
1 error
```

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: long cannot be converted to boolean
b=(boolean)a;
  ^
1 error
```

Program 41: float to char

```
class Typecasting
{
    public static void main (String[]args)
    {
        float a = 4.5678f;
        char b;
        b=(char)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
♦
```

Conclusion :

Float to char conversion is Explicit Type Casting.

Program 42: float to byte

```
class Typecasting
{
public static void main (String[] args)
{
float a = 4.5678f;
byte b;
b=(byte)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
4
```

Conclusion :

Float to byte conversion is Explicit Type Casting.

Program 43: float to short

```
class Typecasting
{
    public static void main (String[] args)
    {
        float a = 4.5678f;
        short b;
        b=(short)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
4
```

Conclusion :

Float to short conversion is Explicit Type Casting.

Program 44: float to int

```
class Typecasting
{
public static void main (String[]args)
{
float a = 4.5678f;
int b;
b=(int)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
4
```

Conclusion :

Float to int conversion is Explicit Type Casting.

Program 45: float to long

```
class Typecasting
{
    public static void main (String[] args)
    {
        float a = 4.5678f;
        long b;
        b=(long)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
4
```

Conclusion :

Float to long conversion is Explicit Type Casting.

Program 46: float to float

Casting Not Required. Because same Datatypes.

Program 47: float to double

```
class Typecasting
{
    public static void main (String[] args)
    {
        float a = 4.5678f;
        double b;
        b=a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
C:\Users\sruthi.garikipati\Kodnest>java Typecasting
4.5678
4.567800045013428
```

Conclusion :

Float to double conversion is Implicit Type Casting.

Program 48: float to boolean

```
class Typecasting
{
public static void main (String[] args)
{
float a = 4.5678f;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[] args)
{
float a = 4.5678f;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT :

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: float cannot be converted to boolean
b=(boolean)a;
    ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: float cannot be converted to boolean
b=a;
    ^
1 error

C:\Users\sruthi.garikipati\Kodnest>
```

Program 49: double to char

```
class Typecasting
{
public static void main (String[]args)
{
double a = 34567123.98;
char b;
b=(char)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
?
```

Conclusion :

double to char conversion is Explicit Type Casting.

Program 50: double to byte

```
class Typecasting
{
    public static void main (String[]args)
    {
        double a = 34567123.98;
        byte b;
        b=(byte)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
-45

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

double to byte conversion is Explicit Type Casting.

Program 51: double to short

```
class Typecasting
{
public static void main (String[]args)
{
double a = 34567123.98;
short b;
b=(short)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
29651

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

double to short conversion is Explicit Type Casting.

Program 52: double to int

```
class Typecasting
{
    public static void main (String[] args)
    {
        double a = 34567123.98;
        int b;
        b=(int)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
34567123
```

Conclusion :

double to int conversion is Explicit Type Casting.

Program 53: double to long

```
class Typecasting
{
public static void main (String[]args)
{
double a = 34567123.98;
long b;
b=(long)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
34567123
```

Conclusion :

double to long conversion is Explicit Type Casting.

Program 54: double to float

```
class Typecasting
{
    public static void main (String[] args)
    {
        double a = 34567123.98;
        float b;
        b=(float)a;
        System.out.println(a);
        System.out.println(b);
    }
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java

C:\Users\sruthi.garikipati\Kodnest>java Typecasting
3.456712398E7
3.4567124E7

C:\Users\sruthi.garikipati\Kodnest>
```

Conclusion :

double to float conversion is Explicit Type Casting.

Program 55: double to double

Casting Not Required. Because same Datatypes.

Program 56: double to boolean

```
class Typecasting
{
public static void main (String[] args)
{
double a = 34567123.98;
boolean b;
b=a;
System.out.println(a);
System.out.println(b);
}
}
```

```
class Typecasting
{
public static void main (String[] args)
{
double a = 34567123.98;
boolean b;
b=(boolean)a;
System.out.println(a);
System.out.println(b);
}
}
```

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: double cannot be converted to boolean
b=a;
  ^
1 error

C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:7: error: incompatible types: double cannot be converted to boolean
b=(boolean)a;
  ^
1 error
```

Program 57: boolean to char

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to char
b=(boolean)a;
   ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 58: boolean to byte

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to char
b=(boolean)a;
    ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 59: boolean to short

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to char
b=(boolean)a;
   ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 60: boolean to int

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to int
b=(int)a;
    ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 61: boolean to long

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to int
b=(int)a;
    ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 62: boolean to float

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to int
b=(int)a;
    ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 63: boolean to double

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

OUTPUT:

```
C:\Users\sruthi.garikipati\Kodnest>javac Typecasting.java
Typecasting.java:5: error: cannot find symbol
boolean a = ture;
            ^
    symbol:   variable ture
    location: class Typecasting
Typecasting.java:7: error: incompatible types: boolean cannot be converted to int
b=(int)a;
    ^
2 errors

C:\Users\sruthi.garikipati\Kodnest>
```

Program 64: boolean to boolean

Casting Not Required. Because same Datatypes.

