

```
class D1
{
    public static void main(String[] args)
    {
        Scanner s=new Scanner(System.in);
        System.out.println("Enter the Data\n1.Byte\n2.Short\n3.Int\n4.Long");
        byte b1=s.nextByte();
        short s1=s.nextShort();
        int i=s.nextInt();
        long l=s.nextLong();
        System.out.println("byte : "+b1+"\nshort : "+s1+"\nint : "+i+"\nlong : "+l);
        s.close();
    }
}
```

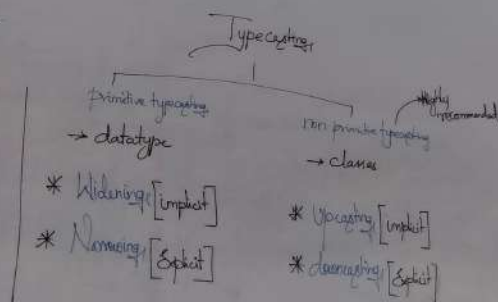
## Type Casting

→ One type into another type  
2 types

\* primitive typecasting

\* non primitive typecasting

→ We can't convert  
boolean and String



### Widening

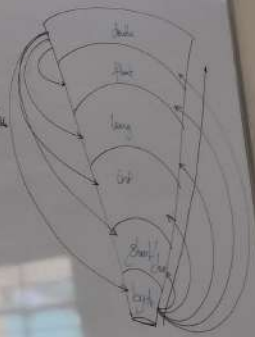
byte < short < int < long < float < double  
char

→ Implicitly done by compiler, Explicit conversion also possible  
→ There is no data loss

### Narrowing

double > float > long > int > short > byte  
char

→ Explicitly done by programmer  
→ There is data loss  
→ Type cast operator



## Type Casting

→ One type into another type:  
2 types

\* primitive typecasting

\* non primitive typecasting

→ We can't convert  
boolean and String

## Typecasting

primitive typecasting

→ datatype

\* Widening [implicit]

\* Narrowing [explicit]

non primitive typecasting

→ classes

\* Upcasting [implicit]

\* Downcasting [explicit]

Highly recommended

### Dynamic Read

- Get the value from User/Programmer.
- We should go by the help of Scanner class.
- In class top we have to import the package.
- Declare Scanner class object creation.
- In Scanner class we have inbuilt function.

How to Declare Scanner class object?

Step 1 Import

Step 2 Import java.util.Scanner;

Step 3 We can declare inside class block as well as inside method block.

Scanner obj; // from new Scanner(System.in);  
obj.nextLine();

Step 4

Declare Variable = Scanner class  
↓  
make method  
↓  
Specify

3 objects

Method signature (return type)

byte	→ nextByte()
short	→ nextShort()
int	→ nextInt()
long	→ nextLong()
float	→ nextFloat()
double	→ nextDouble()
char	→ nextChar()
boolean	→ nextBoolean()
String	→ nextLine()