**How to convert string to int in Java**

[**STRING HANDLING**](http://beginnersbook.com/category/string-handling/)

Sometimes there is a need to convert a String into an Integer value. Even though a String is made up of digits like 1,2,3 etc any arithmetic operation cannot be performed on it until unless it gets converted into an Integer value. In this tutorial we will see two ways for String to int conversion.

**Method 1: Using Integer.parseInt**

String str3="1234";

int num3 = Integer.parseInt(str3);

The value of num3 would be 1234.

**Note**: **All characters in the String must be digits** however the first character can be a minus ‘-‘ sign. For e.g.

String str="-1234";

int num = Integer.parseInt(str);

The value of num would be -1234

[**Integer.parseInt**](http://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#parseInt(java.lang.String)) throws [**NumberFormatException**](http://docs.oracle.com/javase/7/docs/api/java/lang/NumberFormatException.html) If the String is not valid for conversion for e.g.

String str="1122ab";

int num = Integer.valueOf(str);

This set of statement would throw NumberFormatException. you would see a compilation error like this:

Exception in thread "main" java.lang.NumberFormatException: For input string: "1122ab"

at java.lang.NumberFormatException.forInputString(Unknown Source)

at java.lang.Integer.parseInt(Unknown Source)

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**Complete example:**

public class Example1{

public static void main(String args[]){

String str="123";

int num1 = 100;

int num2 = Integer.parseInt(str);

int sum=num1+num2;

System.out.println("Result is: "+sum);

}

}

Output:

Result is: 223

**Method 2: Using Integer.valueOf**

[**Integer.valueOf**](http://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#valueOf(java.lang.String))works same as Integer.parseInt. It also converts a String into an integer value. This is how it can be used:

String str="1122";

int num = Integer.valueOf(str);

The value of num would be 1122.

It also allows first character of String to be a minus ‘-‘ sign.

String str="-1122";

int num = Integer.valueOf(str);

Value of num would be -1122.

Like parseInt method it also throws NumberFormatException when the all the characters in the String are not digits. For e.g. a String with value “11aa22″ would cause such exception during conversion.

**Complete example:**

public class Example2{

public static void main(String args[]){

String str="-234";

int num1 = 110;

//num2 would be having a negative value

int num2 = Integer.valueOf(str);

int sum=num1+num2;

System.out.println("Result is: "+sum);

}

}

Output:

Result is: -124