### Java - Convert double to int example

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In this tutorial, we will learn **how to convert double to int in Java**. As we know double value can contain decimal digits (digits after decimal point), so when we convert double value with decimal digits to int value, the decimal digits are truncated. In this java tutorial, we will see three ways to convert a double value to int. Out of these 3 ways there is one way in which you can round of the double value to nearest integer value.

- 1. Convert double to int using typecasting
- 2. Convert double to int using Math.round() This ensures that the decimal digits double value is rounded of to the nearest int value.
- Convert double to int using Double.intValue()

# 1. Java - double to int conversion using type casting

To typecast a double value to integer, we mention int keyword in the brackets before the decimal double value. The only downside of conversion using typecasting is that the double value is not rounded of, instead the digits after decimal are truncated. We can solve this issue by using Math.round() method which we have discussed in the second example.

```
public class JavaExample{
   public static void main(String args[]){
        //double value
        double dnum = 99.99;

        //convert double to int using typecasting
        int inum=(int)dnum;

        //displaying int value after conversion
        System.out.println(inum);
   }
}
```

Output: Here is the output of the above program –

```
package com.beginnersbook;
     public class JavaExample{
         public static void main(String args[]){
  30
  4
             //double value
  5
             double dnum = 99.99;
  6
             //convert double to int using typecasting
  7
  8
             int inum=(int)dnum;
  9
             //displaying int value after conversion
 10
             System.out.println(inum);
 11
 12
         7
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<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualN
```

# 2. Java - Convert double to int using Math.round()

99

In this example we are converting the double value to integer value using Math.round() method. This method rounds of the number to nearest integer. As you can see in the output that the double value 99.99 is rounded of to the nearest int value 100.

```
public class JavaExample{
  public static void main(String args[]){
    //double value
    double dnum = 99.99;

    /* convert double to int using Math.round()
    * This method rounds of the double value to
    * nearest integer value.
    */
    int inum=(int) Math.round(dnum);
```

```
//displaying int value after conversion
      System.out.println(inum);
  }
}
Output:
package com.beginnersbook;
      public class JavaExample{
   30
          public static void main(String args[]){
   4
              //double value
              double dnum = 99.99;
   5
   6
  7
              /* convert double to int using Math.round()
               * This method rounds of the double value to
               * nearest integer value.
  9
  10
  11
              int inum=(int) Math.round(dnum);
  12
  13
              //displaying int value after conversion
  14
              System.out.println(inum);
 15
          }
  16 }
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<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualMachines/
```

# Convert double to int in Java using Double.intValue()

100

In this example we are using <u>Wrapper class</u> Double. This is same as typecasting method, where the digits after decimal are truncated.

```
public class JavaExample{
  public static void main(String args[]){
        Double dnum = 99.99;
        int inum = dnum.intValue();
        System.out.println(inum);
   }
}
```

#### Output:

```
package com.beginnersbook;
     public class JavaExample{
         public static void main(String args[]){
  30
             Double dnum = 99.99;
  4
  5
             int inum = dnum.intValue();
             System.out.println(inum);
  6
  7
         }
     }
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<terminated> JavaExample [Java Application] /Library/Java/Java\
99
```