Java - Convert double to string example

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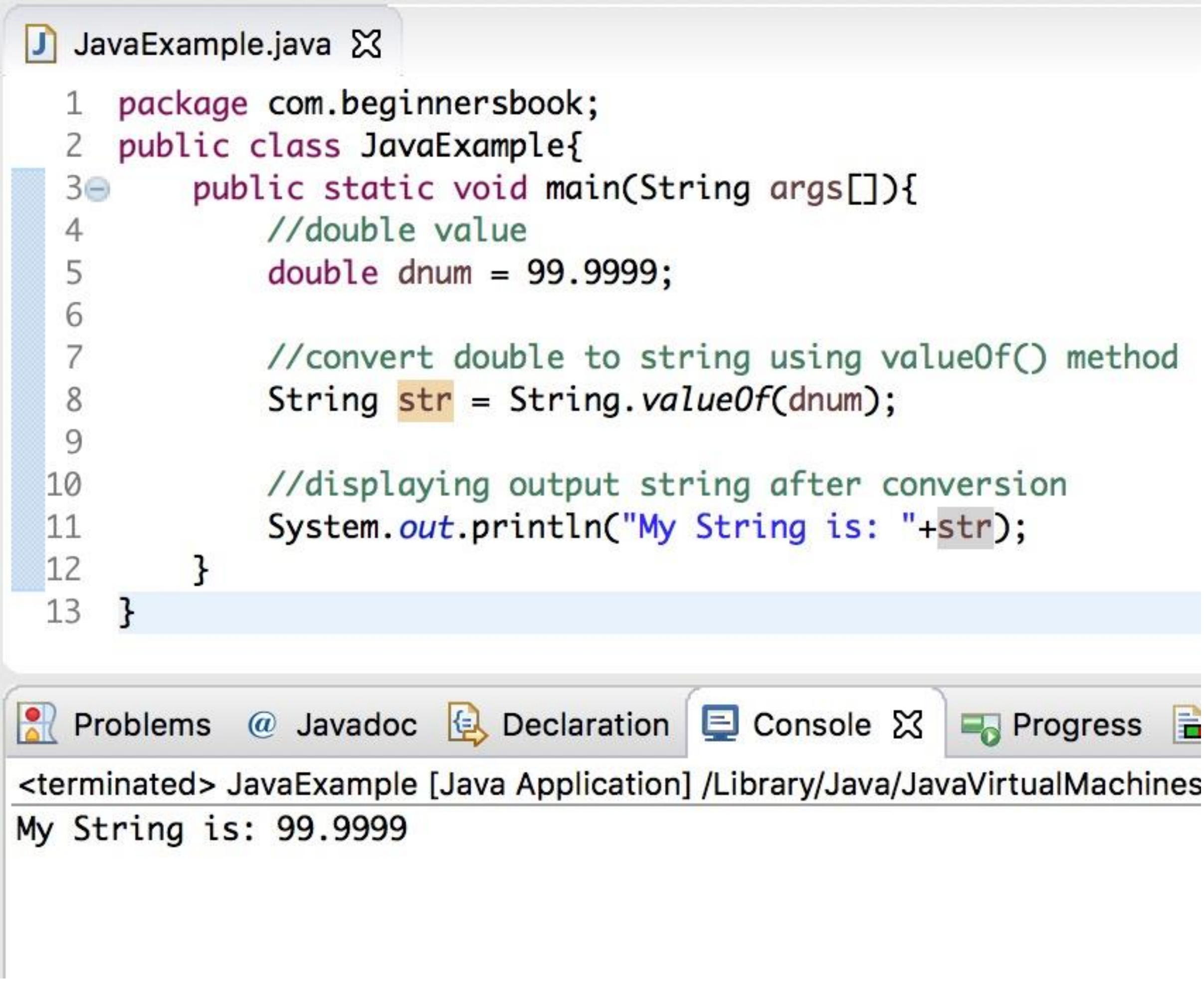
In this java tutorial, we will learn how to **convert double to string in Java**. There are several ways we can do this conversion –
1. Java – Convert double to string using String.valueOf(double) method.
2. Convert double to string in Java using toString() method of Double wrapper class.
3. Java – double to string conversion using String.format() method
4. Convert double to string using DecimalFormat.format()
5. Java Convert double to string using StringBuffer and StringBuilder.

1. Java - Convert double to string using String.valueOf(double) method

public static String valueOf(double d): We can convert the double primitive to String by calling valueOf() method of String class. This method returns the string representation of the double argument.

```
public class JavaExample{
   public static void main(String args[]){
        //double value
        double dnum = 99.9999;

        //convert double to string using valueOf() method
        String str = String.valueOf(dnum);

        //displaying output string after conversion
        System.out.println("My String is: "+str);
   }
}
```

Output:



```
package com.beginnersbook;
public class JavaExample{
    public static void main(String args[]){
        //double value
        double dnum = 99.9999;

        //convert double to string using valueOf() method
        String str = String.valueOf(dnum);

        //displaying output string after conversion
        System.out.println("My String is: "+str);
    }
}
```

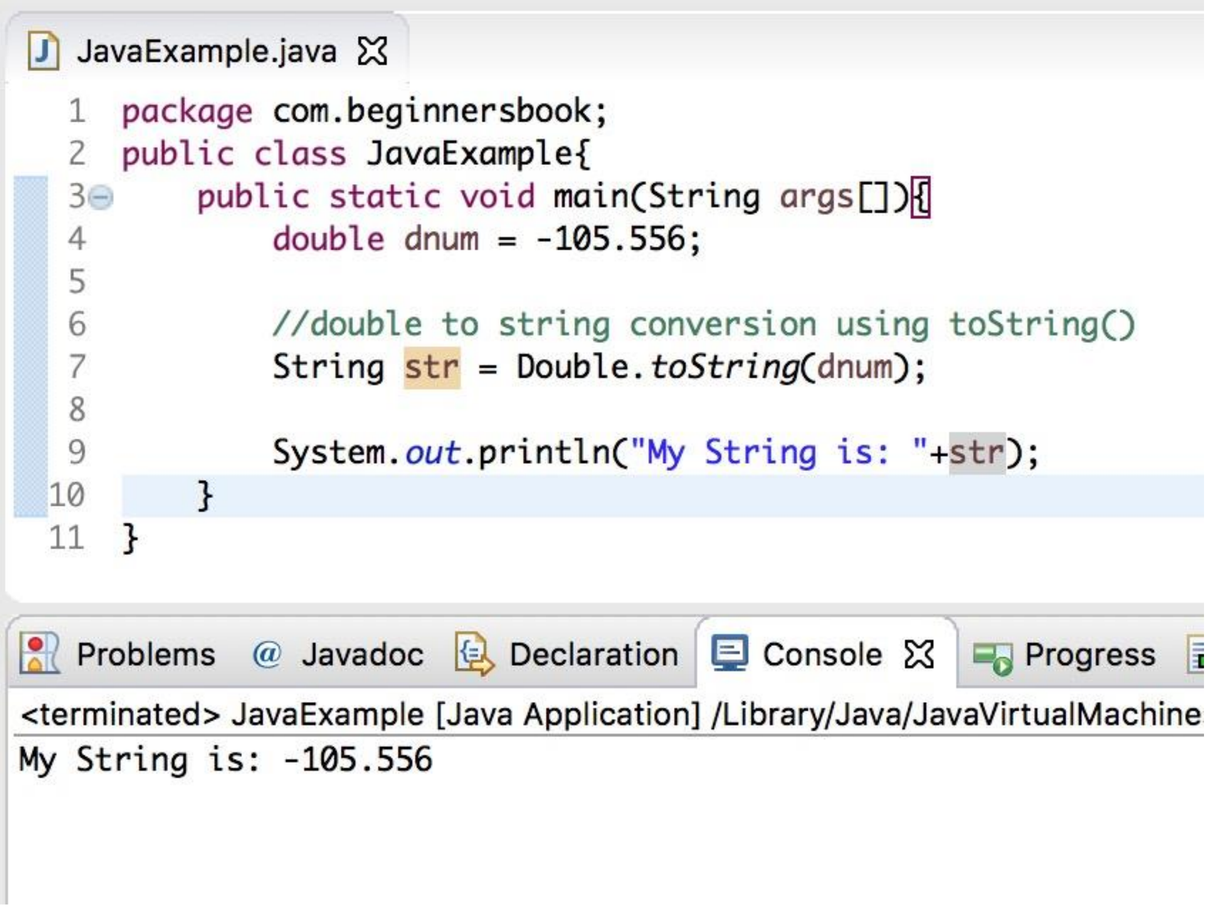
```
<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualMachines
My String is: 99.9999
```

2. Convert double to string in Java using toString() method of Double wrapper class

public String toString( ): This is the another method that can be used to **convert double to String**. This method returns a string representation of the Double object. The primitive double value represented by this object is converted to a string.

```
public class JavaExample{
   public static void main(String args[]){
        double dnum = -105.556;

        //double to string conversion using toString()
        String str = Double.toString(dnum);

        System.out.println("My String is: "+str);
   }
}
```

Output:



```java
package com.beginnersbook;
public class JavaExample{
    public static void main(String args[]){
        double dnum = -105.556;

        //double to string conversion using toString()
        String str = Double.toString(dnum);

        System.out.println("My String is: "+str);
    }
}
```

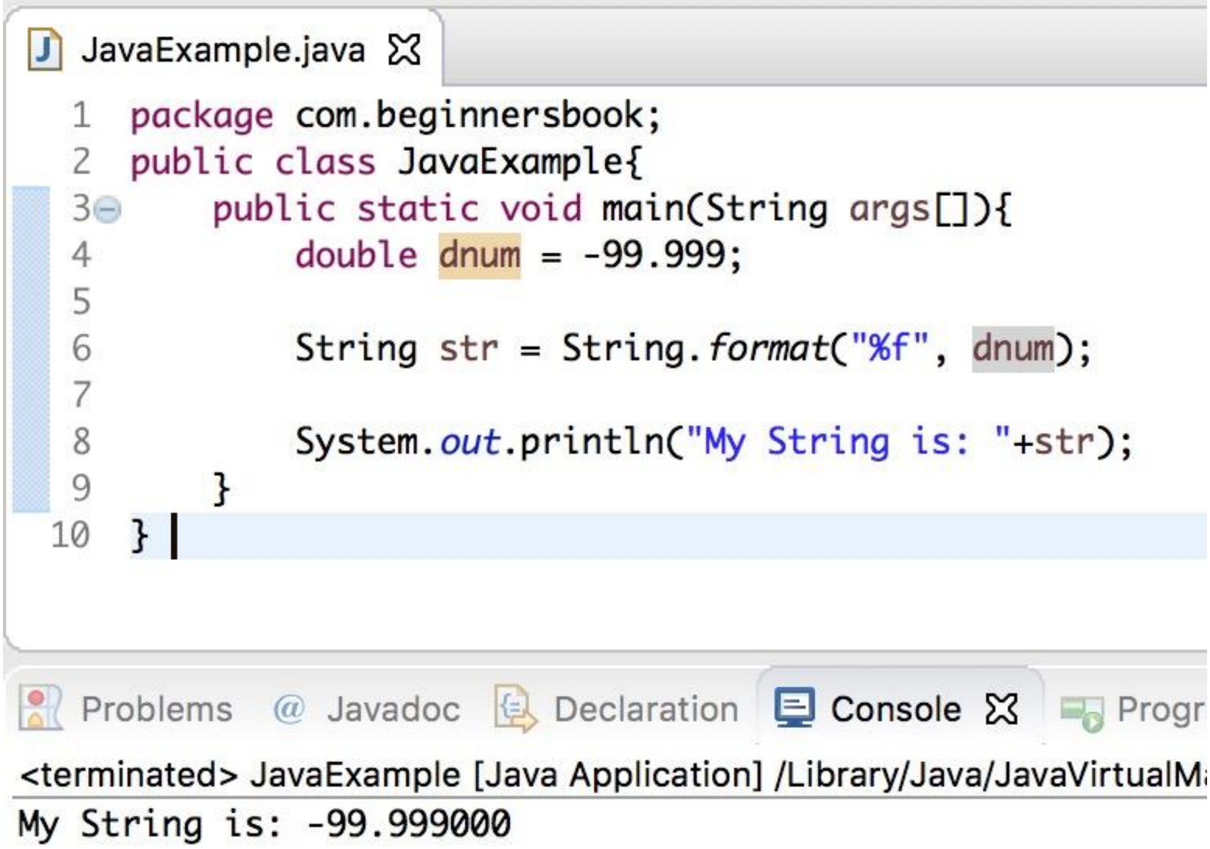
```
<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualMachine
My String is: -105.556
```

3. Java - double to string conversion using String.format() method

String.format() method can be used for the double to string conversion.

```java
public class JavaExample{
   public static void main(String args[]){
        double dnum = -99.999;

        String str = String.format("%f", dnum);

        System.out.println("My String is: "+str);
   }
}
```

Output:



```
package com.beginnersbook;
public class JavaExample{
    public static void main(String args[]){
        double dnum = -99.999;

        String str = String.format("%f", dnum);

        System.out.println("My String is: "+str);
    }
}
```

```
<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualM
My String is: -99.999000
```

We can adjust the number of decimal digits in our string using this method. For example: If we want only two digits after decimal point in our string then we can change the code like this:

```
double dnum = -99.999;
String str = String.format("%.2f", dnum);
```

The output of this code would be: `My String is: -100.00`

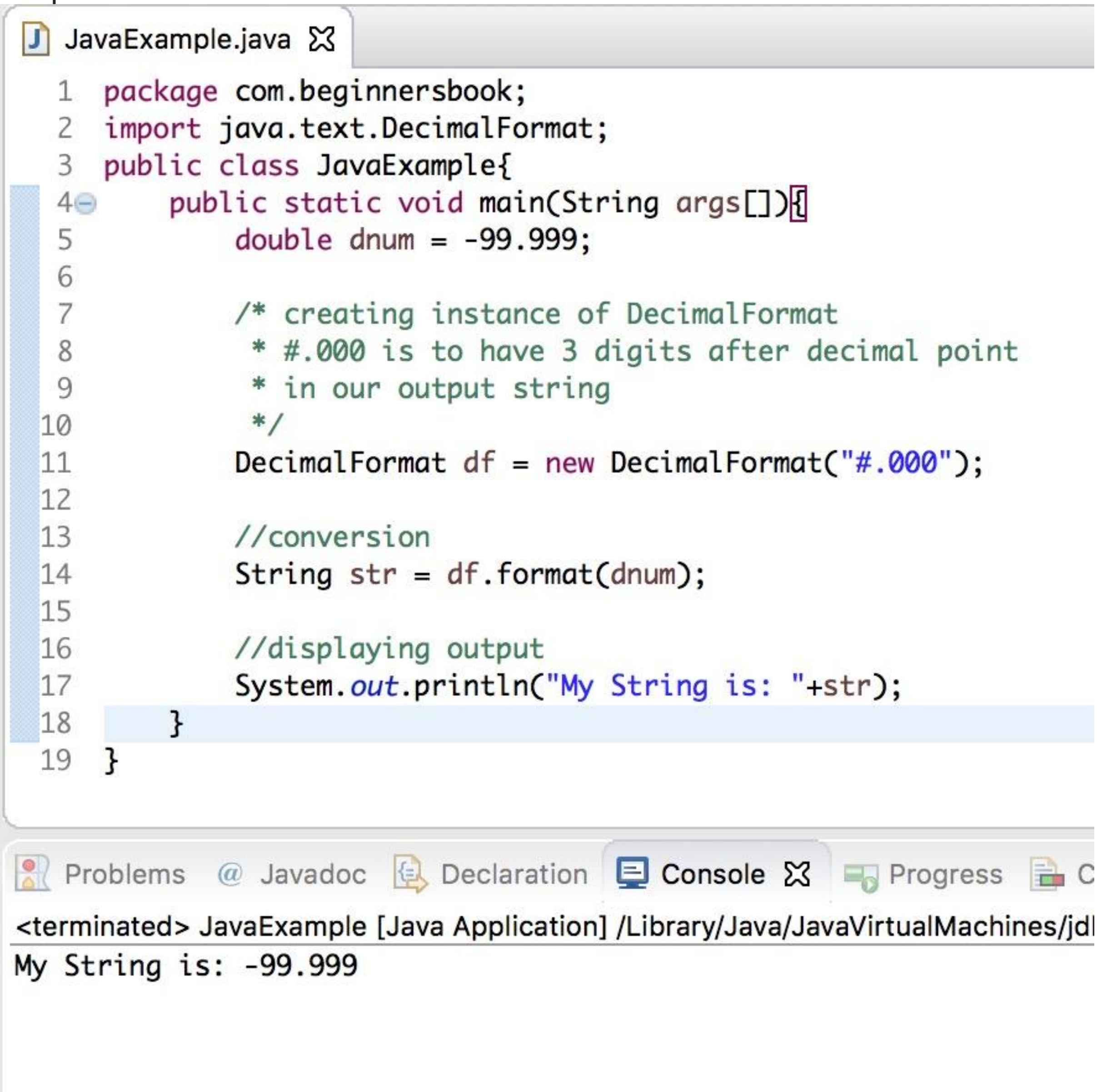
This is because this method round of the double value.

4. Convert double to string using DecimalFormat.format()

Similar to String.format() method. To use this, we have to import the package: java.text.DecimalFormat in our code.

```
import java.text.DecimalFormat;
public class JavaExample{
   public static void main(String args[]){
        double dnum = -99.999;
        /* creating instance of DecimalFormat
         * #.000 is to have 3 digits after decimal point
         * in our output string
         */
        DecimalFormat df = new DecimalFormat("#.000");

        //conversion
        String str = df.format(dnum);

        //displaying output
        System.out.println("My String is: "+str);
   }
}
```

Output:



```
package com.beginnersbook;
import java.text.DecimalFormat;
public class JavaExample{
    public static void main(String args[]){
        double dnum = -99.999;

        /* creating instance of DecimalFormat
         * #.000 is to have 3 digits after decimal point
         * in our output string
         */
        DecimalFormat df = new DecimalFormat("#.000");

        //conversion
        String str = df.format(dnum);

        //displaying output
        System.out.println("My String is: "+str);
    }
}
```

```
<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualMachines/jdl
My String is: -99.999
```

5. Java Convert double to string using StringBuffer and StringBuilder

We can convert double to string using StringBuffer and StringBuilder as well. The steps of conversion are same for both. The steps are as follows –

1. Create StringBuffer/StringBuilder instance
2. Append double value
3. Convert StringBuffer/StringBuilder to String

double ->StringBuffer ->String

```
public class JavaExample{
   public static void main(String args[]){
        //double value
        double dnum = 89.891;

        //creating instance of StringBuffer
        StringBuffer sb = new StringBuffer();

        //appending the double value to StringBuffer instance
        sb.append(dnum);

        //converting StringBuffer to String
        String str = sb.toString();

        System.out.println("My String is: "+str);
   }
}
```

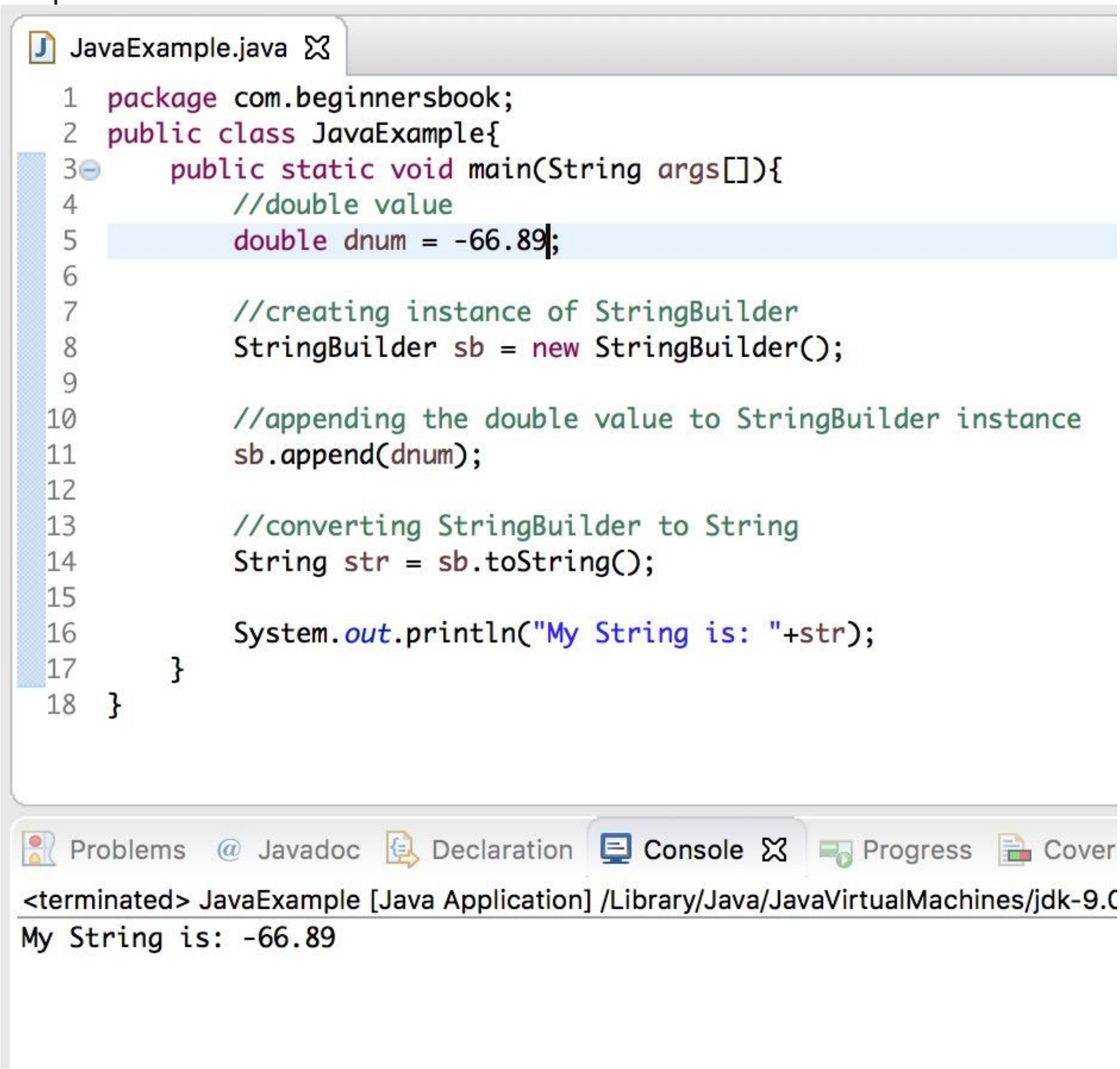
Output:

```
My String is: 89.891
```

double ->StringBuilder ->String

```
public class JavaExample{
   public static void main(String args[]){
        //double value
        double dnum = -66.89;

        //creating instance of StringBuilder
        StringBuilder sb = new StringBuilder();

        //appending the double value to StringBuilder instance
        sb.append(dnum);

        //converting StringBuilder to String
        String str = sb.toString();

        System.out.println("My String is: "+str);
   }
}
```

Output:



```java
package com.beginnersbook;
public class JavaExample{
    public static void main(String args[]){
        //double value
        double dnum = -66.89;

        //creating instance of StringBuilder
        StringBuilder sb = new StringBuilder();

        //appending the double value to StringBuilder instance
        sb.append(dnum);

        //converting StringBuilder to String
        String str = sb.toString();

        System.out.println("My String is: "+str);
    }
}
```

```
<terminated> JavaExample [Java Application] /Library/Java/JavaVirtualMachines/jdk-9.0
My String is: -66.89
```