**‑‑‑Main Concept – String Methods**

Here are some of the String class methods that I thought you would find useful:

String Word = “Programming”;

|  |  |  |
| --- | --- | --- |
| Method | Description | Example |
| String charAt(int index) | Returns the character at the specified index. | Word.charAt(3) is g if the string being referenced is 'Programming' |
| String concat(String str) | combines specified string to the end of this string | Word.concat("queen"); will return "programmingqueen" |
| boolean equals(String str) | returns true if the strings are the same (works like '=') | Word.equals("Programming") will return a true |
| boolean equalsIgnoreCase(String str) | same as above only ignores the case | Word.equals("PROgrammING") will return a true |
| int length() | returns the length of the string | Word.length() will return integer value 11 |
| String replace(char old, char new) | returns a new string after replacing all occurrences of old by new | Word.replace('o','i') will return the word: "prigramming" |
| String substring(int beginIndex) | returns the part of the word beginning with beginIndex | Word.substring(2) will return "ogramming" |
| String substring( int Ind1, int Ind2) | returns the part of the word between Ind1 and Ind2 | Word.substring(1,4) will return "rogr" |
| Char[] toCharArray() | converts a string to an array of characters |  |
| String toLowerCase() | converts a string to all lower case |  |
| String toUpperCase() | converts a string to all upper case |  |

In this example, the String Word = “Programming” can be thought of as a list of characters all strung together:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P | R | O | G | R | A | M | M | I | N | G |

Word.charAt(0) = ‘P’

General syntax for using methods from any class:

String\_variable\_name.method\_name(parameter);

Word.charAt(1) = ‘R’

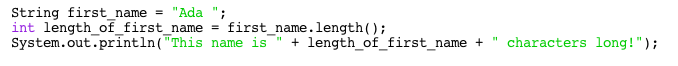
Word.charAt(5) = ‘A’

Here are some examples of the methods mentioned above. Followed by a program that utilizes each of them.

The general syntax that you use to call on a String method:

Declare the String object: String my\_word;

Use the object (my\_word in this case) to get into the String class and use some of those methods! : my\_word.length() will return the integer value of the length of the String my\_word.



This code will give the output:

Are you surprised it’s 4 and not 3? See that little space after the word Ada? That is the 4th character.

This code will take a String and split it in half, then make it two words. I am using several of the String methods that are listed above. See if you can spot them 

Both words should start with a capital letter:

n = “Computer”;

int half\_length = n.length()/2;

String child1 = n.substring(0,half\_length);

String first\_letter\_of\_child2 = " "+n.charAt(half\_length);

String child2 = first\_letter\_of\_child2.toUpperCase()+ n.substring(half\_length+1,n.length());

child1 will have a value of **Comp**

child2 will have a value of **Uter**