"समय न लगाएँ इसमें कि क्या करना है,
वरना समय ये तय करेगा कि आपका क्या कराना है।"

String

It is a collection of characters ending with null character.

s = "Java" (always in double quote)

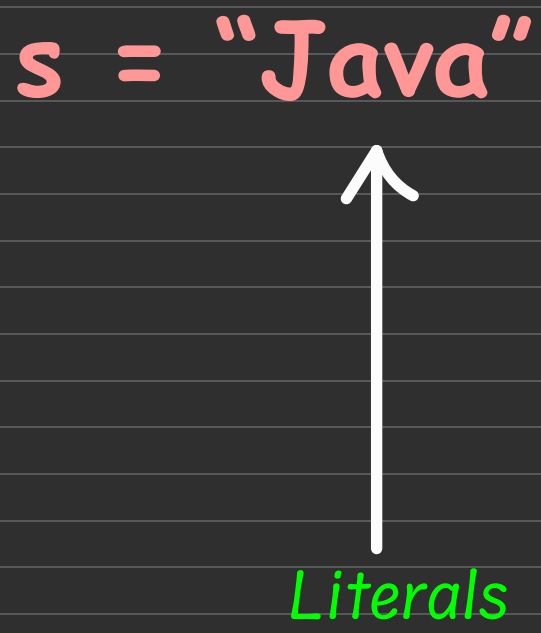
Syntax

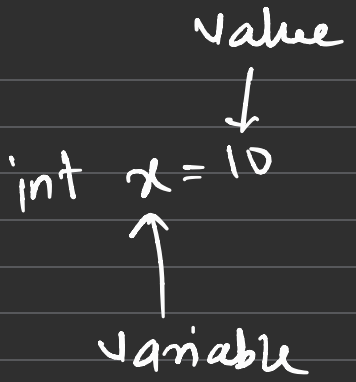
String nameOfString

Eg:

String str = "Java"

String literals



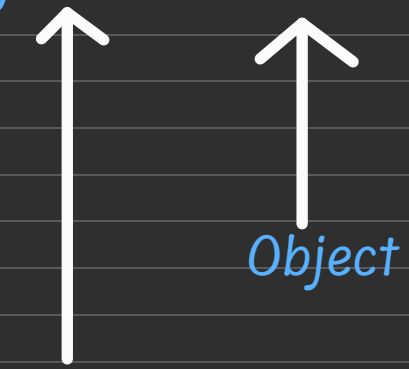


Amazing facts of String in Java

String is not a data type in java - it is a Class

Literal is considered as Object of the String class.

String str = "Java"



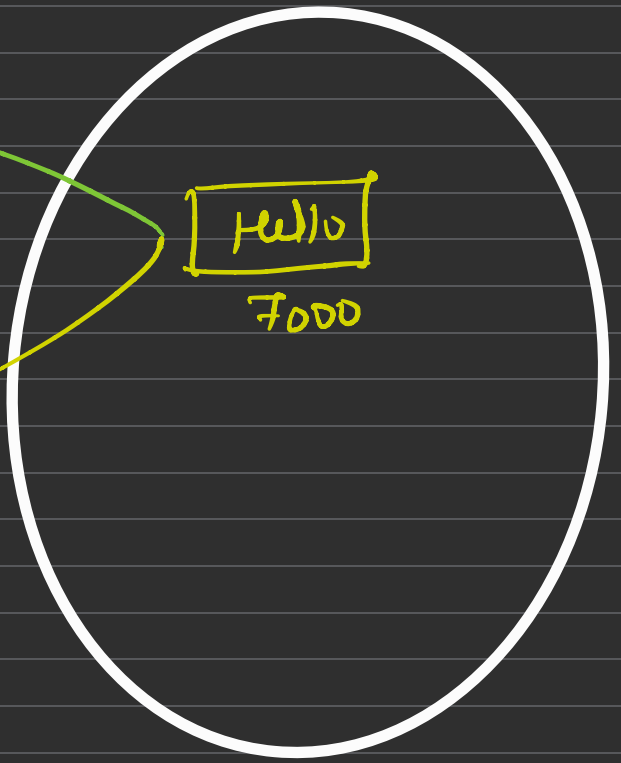

```
String s = new String("Java")

Class Animal
{

}

Animal obj = new Animal()
```

String Constant Pool

JVM

String p = "Hello"

String h = "Hello"



String s = new String ("Hello")

String x = new String (Hello)

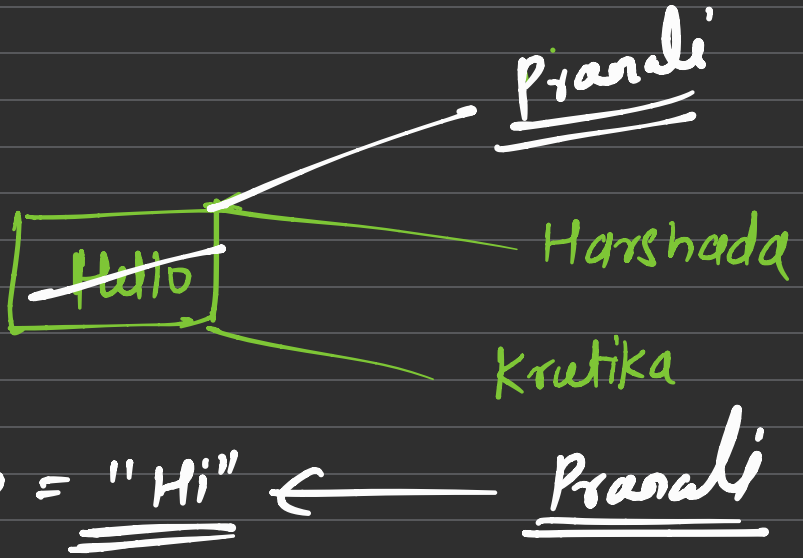
Immutable String

String in java is immutable- which means it cannot be changed or modified.

This is because - String is an object not a data type.

Why String is Immutable

```
String p = "Hello"
String h = "Hello"
String k = "Hello"
```



Functions of the String

length() : mainly gives the length of the string.

charAt(index) : mainly gives the character present at the given index.

indexOf(char) : mainly gives the index of the character.

lastIndexOf() : mainly gives the index of the char from last.

substring(index) : mainly gives substring from index to N

equal(str2) : mainly checks whether two strings are equal or not.

toLowerCase() : Convert whole string in lower case.

toUpperCase() : Convert whole string in upper case.

Mutable String

StringBuilder

StringBuffer

✓ StringBuilder s = new StringBuilder()

– StringBuffer s = new StringBuffer()

Multi-Threading → Costly ← Memory, CPU Cycle

– Synchronization & Thread safe

10 ~~9~~

$x = 10$ Shared

Pranali P_1	Kruttika P_2
Read (x)	Read (x)
x = x + 1	x = x - 1
printf(x)	printf(x)
10	9

~~9~~ 10

$x = 10$

$x = 9$

$x = 9$

append(char/string) : insert the char/string at the end of given string.

deleteCharAt(index) : deletes the char from given index

setCharAt(index, char) : sets the new char at given index.

reverse() : mainly reverse the whole string.