

## Primitive Data Types - Summary

Data Type	Keyword	Size(bit)	Size(byte)	Min	Max
character	char	16	2	0	65535
byte	byte	8	1	-128	127
short	short	16	2	-32768	32767
integer	int	32	4	-2 <sup>31</sup>	-2 <sup>31</sup> -1
float	float	32	4	1.4e-45	3.4e+38
long	long	64	8	-2 <sup>63</sup>	-2 <sup>63</sup> -1
double	double	64	8	4.9e-324	1.8e+308
boolean	boolean	NA	NA	false	true

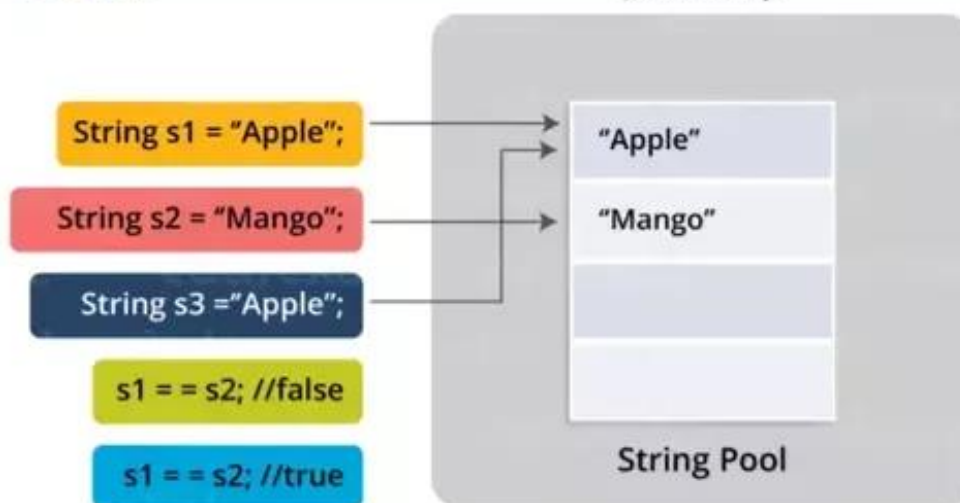
# Types of Literals

***There are four types of literals in java, which are based on the types of variables present***

- ❑ Numeric Literal
  - ✓ int → ex: 7
  - ✓ double → ex: 12.87 , 12e22 , 19E-95
  - ✓ float → ex: 12.87f , 123.988F
- ❑ Boolean Literal
  - ✓ true or false
- ❑ Character Literal
  - ✓ 'a' , 'A' , '#' , '3' → ASCII
- ❑ String Literal
  - ✓ "hi from Marwa" , "Welcome \n in New Horizons"

edureka!

Java Heap



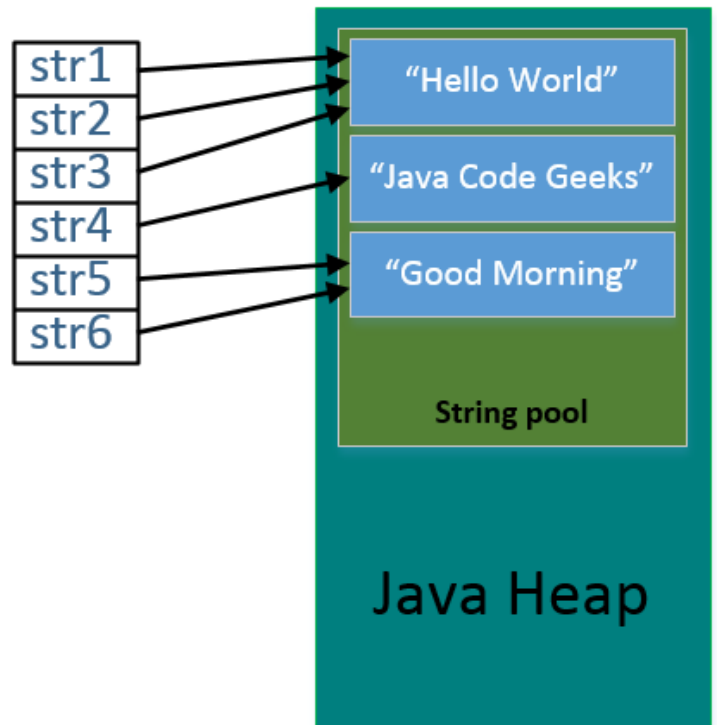
name of variable	storage address	content
	0000	
	0001	
a →	0002	1008
	0003	
	0004	
	...	
	...	
	1004	
b →	1005	
	1008	
	1009	
	1010	

*points to*

## Program

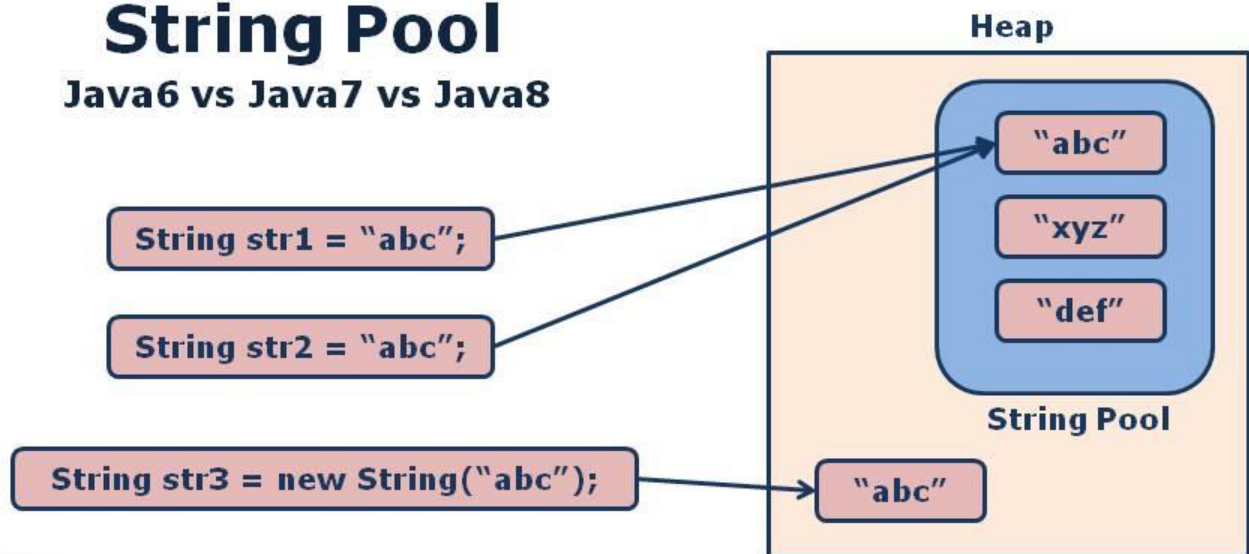
```
String str1 = "Hello World";
String str2 = "Hello World";
String str3 = "Hello World";
String str4 = "Java Code Geeks";
String str5 = "Good Morning";
String str6 = "Good Morning";
```

## String References



# String Pool

Java6 vs Java7 vs Java8



codepumpkin.com