

Day 10

Concept's
Float → less precision 0.0001

Long → More precision 0.0000000000002

operator's

① Arithmetic Operators.

It help to perform basic mathematic operation.

Arithmetic operators are binary operators which are use to perform basic mathematical operation such as addition, subtraction, multiplication, division & modulus.

② Addition (+):

Addition operators helps us to find sum of two values.

	operand1	operator	operand2	Result	Type of Result
①	10 (byte)	+	20 (byte)	30	int
②	200 (short)	+	500 (short)	700	int
③	'a' (char)	+	'b' (char)	195	int
④	2000 (int)	+	9000 (int)	11,000	int
⑤	250L (Long)	+	25000L (Long)	25,250	Long
⑥	1.1F (Float)	+	2.2F (Float)	3.3000002	Float
⑦	1.1 (double)	+	2.2 (double)	3.3000000000002	double
⑧	"abc" (String)	+	"def" (String)	"abcdef"	String
⑨	true (boolean)	+	false (boolean)	CTE	CTE

II Subtraction: → (-)

Subtraction operators helps us to find Subtraction of two values.

	Operand1	Operator	Operand2	Result	Type of Result
(I)	10 (byte)	-	20 (byte)	-10	int
(II)	200 (short)	-	500 (short)	-300	int
(III)	'a' char	-	'b' (char)	-1	int
(IV)	2000 (int)	-	9000 (int)	-7000	int
(V)	2501 (long)	-	9001 (Long)	-6500	long
(VI)	250f (float)	-	900f (float)	-650.0	float
(VII)	250 (double)	-	900 (double)	-650.0	double
(VIII)	"abc" (String)	-	"def" (String)	CTE	CTE
(IX)	true (boolean)	-	true (boolean)	CTE	CTE

III Multiplication (*): →

Multiplication operators helps us to find multiplication of two values.

	Operand1	Operator	Operand2	Result	Type of Result
(I)	10 (byte)	*	20 (byte)	200	int
(II)	200 (short)	*	500 (Short)	100000	int
(III)	'a' char	*	'b' char	0506	int
(IV)	200 (int)	*	500 (int)	100000	int
(V)	200 (long)	*	500 (Long)	100,000	long
(VI)	200f (float)	*	500f (float)	100000.0	float
(VII)	250 (double)	*	900 (double)	225000.0	double
(VIII)	"abc" (String)	*	"def" (String)	CTE	CTE
(IX)	true (boolean)	*	true (boolean)	CTE	CTE

④ Division →

operand1	operator	operand2	Result	Type of Result.
10 (byte)	/	20 (byte)	0	int
100 (short)	/	20 (short)	5	int
1000 (int)	/	20 (int)	50	int
'a' (char)	/	'b' (char)	1	int
250L (long)	/	20L (long)	12.5	Long / float
1.5F (float)	/	2.2F (float)	0.5	float
1.2 (double)	/	2.2 (double)	0.5	double
"abc" (String)	/	"def" (String)	Bad op.	Bad op.
true (boolean)	/	true (boolean)	CTE	CTE

⑤ Modules : →

operand1	operator	operand2	Result	Type of Result.
10 (byte)	%	20 (byte)	20	int
340 (short)	%	290 (short)	200	int
30 (int)	%	20 (int)	10	int
'a' (char)	%	'b' (char)	97	int
250L (long)	%.1f	20L (long)	12.5	long / float
3.3F (float)	%.1f	4.4F (float)	9.4	float
0.4 (double)	%.1f	3.1 (double)	0.2999	double
"abc" (String)	%o	"def" (String)	CTE	CTE
true (boolean)	%.1f	true (boolean)	CTE	CTE