Java Programming for Beginners

Lab Exercise 2
Answer Key

1) For each statement below, record what you expect the result to be. Then, write Java code to compute the result. Were you correct?

Statement	Expected Value	Computed Value
f = 5 * 7 / 3		11
float f = (5 * 7) / 3.0f		11.67
int x = 5 + 'a'		102
char c = java.lang.Math.min('a', 'A')		65
int x = 2147483647 + 1		-2137483648

2) Java primitives have fixed sizes in memory. As such, a primitive has a minimum and maximum value. What are the minimum and maximum values for the following types? Where did you find this information?

Record the number of bits in memory assigned to each type. What is the relationship between the values in this table?

Type	Size in Memory	Min-Value	Max-Value
int	32-BIT	-2147483648	2147483647
boolean	64-BIT	-9.22E+018	9.22E+018
char	16-BIT	0 ('0000')	65535 ('FFFF')
String	Trick question!	Strings are not…	Primitives!

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