

CS 430 Expressions Lab

Specification 1

Precedence	Associativity	Operand Evaluation Order
= (lowest)	R to L	L to R
+, -	L to R	
*, /, %	L to R	
++, --	-	
[] (highest)	-	

Specification 2

Precedence	Associativity	Operand Evaluation Order
= (lowest)	R to L	L to R
*, /, %, +, -	R to L	
++, --	-	
[] (highest)	-	

Specification 3

Precedence	Associativity	Operand Evaluation Order
= (lowest)	R to L	R to L
*, /, %	L to R	
+, -	L to R	
++, --	-	
[] (highest)	-	

Problems

Evaluate each expression below for each specification given above.

CS 430 Expressions Lab

1. Initialization: $a = 5$; $b = 6$; $c = 3$;

Expression: $d = a++ * b + c - 4 * a--$

Specification 1:

Specification 2:

Specification 3:

2. Initialization: $k = 3$; $a = \{0, 1, 2, 3, 4\}$; Expression: $a[k--] = a[k--] = k--$

Specification 1:

Specification 2:

Specification 3:

3. Initialization: $k = 0$; $a = \{5, 9, 2, 3, 4\}$; Expression: $a[k]++ * k + 4 / ++k$

Specification 1:

Specification 2:

Specification 3:

4. Initialization: $k = 0$; $a = \{3, 4, 5, 6, 7\}$; Expression: $a[k++] * ++k \% a[1] + 2$

Specification 1:

Specification 2:

Specification 3: