**CS403/503 Programming Languages  
Spring 2021**Assignment #3

1. Problem 19 of Chapter 7 on Page 327

Answer:

1. Operands are evaluated left to right

X = 7

1. Operands are evaluated right to left

X = 12

1. Programming Exercise 7 of Chapter 7 on Page 328

Answer:

#include <iostream>

using namespace std;

void show\_result(int a) {

cout << "Value of the expression is " << a << "\n";

}

int main() {

//declear varibles

int a = 3;

int b = 4;

int c = 5;

int d = 6;

//passing expression

show\_result(a+b-c\*d);

show\_result(a+c\*(-b)+d);

show\_result(++a+b-c\*d++);

show\_result(a/b\*(-c)+d);

return 0;

}

Sample output:

Value of the expression is -23

Value of the expression is -11

Value of the expression is -22

Value of the expression is 2

1. Programming Exercise 1 of Chapter 8 on Page 362

Answer:

1. C

for(k = (j+13)/27;k<=10;k++) {

i = 3 \* (k+1) - 1;

}

1. Python

for k in range((j+13)/27,11):

i = 3 \* (k+1) – 1

1. Ruby

for k in ((j+13)/27)..10 do

i = 3 \* (k+1) - 1

end

1. Programming Exercise 5 of Chapter 8 on Page 363

Answer:

for (i = 1; i<=n; i++) {

int count = 1;

for(j = 1; j<=n; j++) {

if(x[i][j] == 0) {

count++;

}

}

if(count == n) {

printf(“First all-zero row is: %d\n”, i);

break;

}

}