**CEIS 420 Week 4 Homework**

**Question 1**

Rewrite the following code segment using multiple-selection statement in C++, Java, or C#.

**if** (( k == 1 ) || ( k == 2 )) j = 2 \* k – 1  
**if** (( k == 3 ) || ( k == 5 )) j = 3 \* k + 1  
**if** (( k == 4 ) j = 4 \* k – 1   
**if** (( k == 6 ) || ( k == 7 ) || ( k == 8 )) j = k – 2

Answer (Java):

switch (k){

case 1, 2:

j=2\*k-1;

break;

case 3, 5:

j=3\*k+1;

break;

case 4:

j=4\*k-1;

break;

case 6, 7, 8:

j=k-2;

break;

default:

j=0;

break;

}

**Question 2**

Consider the following program written in C syntax.

void swap (int a, int b) {

int temp;

temp = a;

a = b;

b = temp;

}

void main ( ) {

int value = 2, list[5] = {1, 3, 5, 7, 9};

swap (value, list[0]);

}

For both of the following parameter-passing methods, what is the value of the first element of list after both of the following?

1. Pass-by-value for list[0]
2. Pass-by-reference for list[0]

Answer:

a/ 2

b/ 1