CSC301 Assignment #9

Baheem Ferrell

Chapter 18, Exercise 6:
This code fragment uses arrays in Java. The first line declares and allocates an array of two integers. The next two lines initialize it. (Java arrays are indexed starting from 0.)

```
int[] A = new int[2];
A[0] = 0;
A[1] = 2;
f(A[0],A[A[0]]);
```

Function f is defined as:
}

a. By value.
After the call to the function f, the final values in array A would be the exact same as before the call. This is because the values are passed in as 0 and 0 and all f is going to do is initially set x = 0 and y = 0, then reassign y = 1 and x = 3. No work was done in the actual array A when these values were passed in by value.

b. By reference.
After the function to f when the values are passed in by reference, A[0] would be 1, and A[1] would be 3. This is because the pointer was set equal to 1 after the line ‘y = 1’ in function f. The end results are A[0] = 3 and A[1] = 2.

c. By value-result.
After the function to call function f when the values are passed in value-result. The A[0] = 3 and A[1] = 2, or A[0] = 1 and A[1] = 3, depending on the order in which the value-result parameters are written back after the call

Grading: One point for each correct answer; one point for each correct explanation using complete sentences and your own words.