**Take-Home: Quiz 8 (15 pts) – More OOP!**

1. **(8 pts – 2 pts/each)** What are the Four Pillars of Object Oriented Programming? Explain each using your own words.
2. **(3 pts)** Given the following function, what is the worst-case Big-O time complexity?

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// Prints all subarrays in arr[0..n-1]

void subArray(int arr[], int n)

{

    // Pick starting point

    for (int i=0; i <n; i++)

    {

        // Pick ending point

        for (int j=i; j<n; j++)

        {

            // Print subarray between current starting

            // and ending points

            for (int k=i; k<=j; k++)

{

                cout << arr[k] << " ";

}

            cout << endl;

        }

    }

}

1. **(4 pts)** What is the difference between a *class* and a *struct*? Explain in your own words. Also, be sure to discuss the visibilities of members in each.