**CSCE 747 - Symbolic Execution Activity  
Name(s):**

**1. The loop body of the binary search can be modified to:**

if (comparison < 0){

low = mid + 1;

}

if (comparison > 0){

high = mid -1;

}

if (comparison = 0){

return dictValues[mid];

}

**Demonstrate using symbolic execution that the path that traverses the false branch of all three statements is infeasible.**

**2. The following method calculates the sum of an array of floats.**

float sum(int array[], int len) {

float sum = 0.0;

int i = 0;

while (i < length) {

sum = sum + array[i];

i = i + 1;

}

return sum;

}

**Write the pre- and post-conditions for this method.**