# Second assignment

**Sylvain Gabry (901215-T255) – sjygabry@kth.se**

**Gabor Andai (880619-4512) – andai@kth.se**

### Algorithm

method BinarySearch( A : array of integer, key : integer ) : integer

begin

var x, l, r : integer;

l=1; r = A.length();

repeat

x = (l+r) div 2;

if key < A[x] then r=x-1 else l=x+1

until ( key==A[x]) or (l>r)

if key==A[x] then return x else return -1

end

# Question 1

**Condensation graph**

# Question 2

### 2.1 Sorting - Pre and Post conditions

### 2.2 Searching - Pre and Post conditions

### 2.3 Membership - Pre and Post conditions

### 2.4 Binary Search - Pre and Post conditions

# Question 3

### 3.1 Do you have a test case that represents a valid scalene triangle?