

634282

What is the size of the largest max-heap which is also a BST?

- *a. 2
- b. 1
- c. 4
- d. 3
- e.
- f. "
- g. "
- h. "
- i. "

General Feedback:

You can have a left child of the root, but as soon as you add the right child, it falls apart.

632764

The following code for a method "minVal" contains a logic error on a single line in the method body, on one of the four lines indicated by comments:

```
public static int minVal(int[] y, int first, int last) {  
    /* This method returns the value of the minimum element in the  
     * subsection of the array "y", starting at position  
     * "first" and ending at position "last".  
    */  
  
    int bestSoFar = y[first];           // line 1  
  
    for (int i=first+1; i<=last; i++)  
    {  
        if ( y[i] < bestSoFar )         // line 2  
  
            bestSoFar = i;               // line 3  
  
    } // for  
  
    return bestSoFar;                  // line 4  
  
} // method minVal
```

Which one of the four lines indicated by the comments contains the logic error?

- a. line 1
- b. line2
- *c. line3
- d. line4
- e.

f. "
g. "
h. "
i. "

General Feedback:

line 3 should be bestSoFar = y[i];

The buggy code is remembering an array position, but the correct code remembers the value.

618493

How many objects and object reference would we have if the following code is executed?

```
Student first_st = new Student();  
Student second_st = new Student();  
Student third_st = second_st;
```

- a. 3, 2
*b. 2, 3
c. 2, 2
d. 3, 3
e.
f. "
g. "
h. "
i. "

General Feedback:

2, 2