

633397

Suppose you try to perform a binary search on the unsorted array {1, 4, 3, 7, 15, 9, 24}. Which element will not be found when you try searching for it?

- a. 7
- b. 1
- c. 9
- *d. 15
- e. 24
- f. "
- g. "
- h. "
- i. "
- j. "

General Feedback:

The answer is 15. The first check will look at 7. 15 is greater than 7, so we search to its right. The second check will look at 9. 15 is greater than 9, so we search to its right. The third check will look at 24. 15 is less than 24, so we look to its left. However, our range has just been inverted and our searching stops, not having found 15.

634167

Fill in the single missing line of code:

```
int p, *r, **q;
```

```
p = 27;
```

```
r = &p;
```

```
// MISSING LINE
```

```
printf("The value is %d", **q); // prints 27.
```

- a. *q = *r;
- *b. q = &r;
- c. **q = p;
- d. q = &&p;
- e. *q = *p;
- f. "
- g. "
- h. "
- i. "
- j. "

General Feedback:

B gets q to point to r, which points to p.

632105

What would be the performance of removeMin and insert methods in a priority queue if it is implemented by a sorted list?

- a. $O(1)$, $O(1)$
- *b. $O(1)$, $O(n)$
- c. $O(n)$, $O(1)$
- d. $O(n)$, $O(n)$
- e.
- f. "
- g. "
- h. "
- i. "

General Feedback:

$O(n)$, $O(1)$