633227
What is printed when the following program runs?

```
public class Main {
  public static boolean getTrue() {
    System.out.print("T");
    return true;
  }

  public static boolean getFalse() {
    System.out.print("F");
    return false;
  }

  public static void main(String[] args) {
    getTrue() || getTrue();
  }
}
```

a. TT

*b. T

c. F

d. TF

e. Nothing is printed.

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

General Feedback:

If the first operand for || is true, as is the case here, the second is not evaluated.

633298
You are storing a complete binary tree in an array, with the root at index 0. At what index is node i's parent?

a. 2i

b. 2i + 1

c. i + i + 2

d. i / 2 + 1

*e. (i - 1) / 2

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

General Feedback:

(i - 1) / 2

634959

Which of the following abstract datatypes would be the best choice for part of the implementation of the part of a compiler that determines whether the parentheses in a program are balanced?

*a. A Stack

b. A Queue

c. A List

d. A PriorityQueue

e. A Dictionary

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

General Feedback:

A close parenthesis must match the most recently entered open parenthesis. So for example, the sequence)()(doesn't match, while ()() and (()) do, even though they all have two open and two close parentheses. To make this work, you can push each open parenthesis on a Stack, and pop it off each time you see a close parenthesis. The last-in-first-out nature of a Stack makes it easy to determine whether the parentheses are balanced.