

# (Trick or Treat) and Trace!

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- Figure out the output of this code without the use of an IDE.

```
public class Main {
    public static void main(String[] args) {
        Halloween you = new Halloween();
        you.buyCandy(50);
        for (int i = 1; i <= 5; i++) {
            you.giveCandy(i * ((i % 2 == 0) ? 3 : 4));
        }
        System.out.printf("I end the night with %d piece(s) of candy.%n",
you.getCandy());
    }
}

public class Halloween {
    private int candy;

    public Halloween() {
        this.candy = 0;
    }

    public Halloween(int candy) {
        this.candy = candy;
    }

    public int getCandy() {
        return this.candy;
    }

    public int buyCandy(int amount) {
        if (amount < 0) {
            System.out.println("Silly you, you can't buy negative pieces of candy
:");
        } else {
            System.out.printf("You went out and bought %d piece(s) of candy.%n",
amount);
            this.candy = this.candy + amount;
        }

        return this.candy;
    }

    public int giveCandy(int amount) {
        if (amount < 0) {
            System.out.println("Silly you, you can't give negative pieces of candy
:");
        } else {
            System.out.printf("You gave out %d piece(s) of candy.%n", amount);
```

```
        this.candy = this.candy - amount;
    }

    return this.candy;
}

public void trickOrTreat(boolean treat) {
    if (treat) {
        System.out.printf("Here are %d pieces of candy!\n", 5);

    } else {
        System.out.printf("You have been tricked and had %d pieces of candy stolen  
from you :(\n", 2);
    }
}
}
```