Justin White

1. The algorithm performs a single operation for each pair of elements in the array, which equals n^2 operations where n is the size of the array. The inner and outer loop both run n times. This means that the time complexity of this algorithm or the big O is O(n^2) , where n is the size of the input array.
2. You would find the heavy bag out of the 20 bags of M&Ms that is 1.1 grams by dividing the bags into smaller groups, weighing each group, and repeating this process until the heavy bag is found.

- The solution has a time complexity of o(logn)

In this equation n is the number of bags

- The best way to go about this problem is by using the binary search algorithm. it minimizes the amount of weighings required to solve the problem. This solution is based on the idea of dividing the bags into smaller groups and weighing each group until the heavy bag is identified. This problem shows that a binary search is an efficient solution for finding the heavy bag, a problem with large amounts of data.