Q4

1. Since i is being doubled in each iteration, that means i will reach n $O(\log_2(n))$ steps.
2. Answer:
   a. The inner loop is run with time $O(n)$, and it is called a further $O(n)$ times. This makes a total of $O(n^2)$ for the main function. Since func() is running for a further $O(y)$ time within the main function, that means the total time complexity is $O(n^3)$ since y goes to a max n.
   b. Each index of W, i and j, stores the sum of the values of P from P[i] to P[j]. For example W[1][10] is the sum of values from P[1] to P[10].