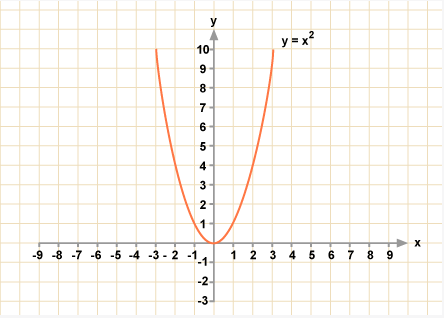
Here is a graph of y =



Here is the graph we get from the various outputs from our code

As our graph is very identical to the graph of y = , we can come to the conclusion that the time complexity of our code is F(n) = O()

Time complexity:

For loop in line 17, 29, 41, 54, the big O notation is O()

If statements in line 45, 47, 58, 65, the big O notation is O(1)

If else statement in line 72 and 73, the big O notation is O(n)

The other variable declaration, scan and print statements etc. have big O notation of O(1)

Now,

The number of for loops = 4

The number of if statements = 4

The number of if-else statements = 1

So,

++++n +1+1+1+1

= 4+n+4

Now,

4+n+4 <= 4++

Or, 4+n+4 <= 9

F(n)=O()