Question 6: WC = Worst case, BC = Best case

Q1 WC $O(n \cdot m)$ - This would be when it runs m time / no matches are found

Q1 BC $\Omega(n)$ - This would be when all characters match on the 1st try.

Q2 WC $O(n \cdot m)$ - The worst case would happen due to many matches occuring, which would cause you to run through both strings fully.

Q2 BC $\Omega(n \cdot m)$ - This happens when the strings have no matches, or very few matches

Q3 WC $O(n)$ - The loop runs n times, being constant with its operations each time

Q3 BC $\Omega(n)$ - The loop runs n times, being constant with its operations each time

n represents the number of terms generated in the sequence

Q4 WC $O(1)$ - This is constant because the loop goes over an array with a fixed size.

Q4 BC $\Omega(1)$ - This is constant because it occurs when the wanted value is found in the 1st element of the array

Q5 WC $O(N)$ - The loop runs for the number of elements in the array.

Q5 BC $\Omega(N)$ - This loop still runs for the number of elements in the array.

N is the # of elements in the array.