Problem #1
(10 marks)

Write a program that will take as input a string that contains only 1s and 0s, and then finds out the number of unique substrings of length n. First, take as input the string. Then take as input the value of n(1<n<10).

Hint: You can convert a binary string to an integer. You are allowed to declare additional arrays. You can use strlen() if you want.

Sample Input	**Sample Output**
011000110101 3	7

Problem #2
(10 marks)

Write a program that takes as input a square matrix of order n and prints “Yes” if the array is a symmetric matrix otherwise prints “No”. A matrix is symmetric if it is equal to its transpose. First you will be given value of n as input. Then there will be n*n integers.

Note: You are not allowed to declare additional arrays.

Sample Input	**Sample Output**
3 1 2 3 2 0 2 3 2 1	Yes
3 1 2 3 4 5 6 7 8 9	No