1. Write a function or functions to circularly shift the elements of a given string by a given amount. A circular left shift is performed if the amount is negative and circular right shift if positive. Implement all the necessary functions on your own. Example: For s = "012345", if amount = 3, after circular shift operation, s becomes "345012"; and if amount = -2, after circular shift operation, s becomes "234501".

2.Write functions and necessary data structure to read N integer numbers from a given file, to count the number of positive divisors of each integer number and print each number-count pair to a given file line by line. Your data structure should relate each integer number to the number of its positive divisors and you should keep the structures in an array.