# **Assignment - 1**

[It is forbidden to use ChatGpt or any other AI tools or to copy from other websites or friends. If you violate this rule, you will face serious penalties.]

1. Reverse a string using a recursive method

Input	Output
Hello	olleH
Data	ataD

2. Write a recursion program which will find the sum until the Nth term of the given series

Input	Output
2	18
1	2

3. You are given a number N. Your task is to determine if the binary representation of N is a palindrome.

#### **Input Format:**

The input contains a single integer N.

### **Output Format:**

Print "YES" if the binary representation of N is a palindrome, otherwise print "NO".

Input	Output
9	YES
4	NO

4. You are given a string s. Your task is to find all permutations of the string s and print each permutation on a new line.

# **Input Format:**

The input contains a single string s.

# **Output Format:**

Print each permutation of the string s on a new line.

Input	Output
DSA	DSA
	DAS
	SDA
	SAD
	ADS
	ASD