## Week 2 - Prompt #2

# **Prompt**

Given a **string**, str , of **size** n find all of its permutations.

## **Constraints**

The input:

- $0 \le n \le 7$
- $str[i] \in (ascii[a-z])$

# **Function Description**

Complete the function str\_permutations . It will return the resulting array.

The function longest\_palindrome has the following parameter(s):

- A string str
- An int left\_side
- Anint right\_side
- An array permutations this value is passed by reference

# **Return/Output**

Return an array, permutations , with all the longest substring palindrome(s).

#### **Notes**

- \* Note #1: HackerRank has a time limit of 2 seconds for C++ prompts.
- \* Note #2: The function will timeout with a 'n' size of (8) roughly 2.8+ seconds. (7) is a safe state for the prompt roughly 312.6 milliseconds.

### Sample Input

{ "abb" }

# **Sample Output**

{ "abb", "abb", "bab", "bba", "bab", "bba" }

# **Explanation**

Output all the permutations of the string

### Resources

**Note**: The code execution time-limit is varied for different programming languages. Ensure that you refer the HackerRank environment specifications page for the time-limit specified for your chosen language. For instance, **Python** has a longer time-limit of **10 seconds** as compared to the **C language** which requires code execution within **2 seconds**.

- https://support.hackerrank.com/hc/en-us/articles/360014096954-The-Terminateddue-to-timeout-status-in-HackerRank-Tests
- https://www.hackerrank.com/environment/languages