



# Internship Test

## Rust Developer Profile Set-1

### Instructions:

- You have to solve the below questions using **Rust**.
- You have **1 day** to submit this.
- To submit your code, upload it to github and fill the below form

<https://docs.google.com/forms/d/e/1FAIpQLSeQ-9PffLbFkzTFfNNv6SqmlyKhV8OT5TJVkPiHBOq9G1-YTQ/viewform>

### Questions:

1. Implement a function that checks whether a given string is a palindrome or not.
2. Given a sorted array of integers, implement a function that returns the index of the first occurrence of a given number.
3. Given a string of words, implement a function that returns the shortest word in the string.
4. Implement a function that checks whether a given number is prime or not.
5. Given a sorted array of integers, implement a function that returns the median of the array.
6. Implement a function that finds the longest common prefix of a given set of strings.
7. Implement a function that returns the kth smallest element in a given array.
8. Given a binary tree, implement a function that returns the maximum depth of the tree.
9. Reverse a string in Rust
10. Check if a number is prime in Rust
11. Merge two sorted arrays in Rust
12. Find the maximum subarray sum in Rust

## CONTACT

Please feel free to contact us in case you have any questions regarding anything about this internship at [hr.quadbtech@gmail.com](mailto:hr.quadbtech@gmail.com). Please put "React JS Internship" as the email subject so that we can filter out your submission/question before anything else.