

A Micro Project Report

on

Problem Solving using C Language

Submitted by
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET
(AUTONOMOUS)**

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Palnadu(Dt.), Andhra Pradesh, India**

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NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET
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CERTIFICATE

This is to certify that **Shaik muzeeb**, **Roll No: 23471A05ap**, a Second Year Student of the Department of Computer Science and Engineering, has completed the Micro Project Satisfactorily in “Problem Solving using C Language” for the Academic Year 2024-2025..

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| S.No | Description |
|------|--|
| 1. | Program in c to read square matrix of order n, find average of elements and then replace each element by 1 if it greater than average otherwise replace by 0 |
| 2. | C program to read a number and displaying its digit in word |
| 3. | C program to generate first N prime number where N is given by user |
| 4. | C program to check string palindrome with Out using string handling functions |

Matrix Average Replacement

```
#include <stdio.h>

void matrixAverageReplacement(int n) {
    int matrix[n][n], sum = 0, count = 0;
    printf("Enter the elements of the matrix:\n");
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
            scanf("%d", &matrix[i][j]);
            sum += matrix[i][j];
            count++;
        }
    }
    double average = (double)sum / count;
    printf("Average: %.2f\n", average);

    printf("Modified matrix:\n");
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
            if (matrix[i][j] > average) {
                matrix[i][j] = 1;
            } else {
                matrix[i][j] = 0;
            }
        }
        printf("%d ", matrix[i][j]);
    }
}
```

```
    }  
    printf("\n");  
}  
  
}  
  
int main() {  
    int n;  
    printf("Enter order of square matrix (n): ");  
    scanf("%d", &n);  
    matrixAverageReplacement(n);  
    return 0;  
}
```