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)

Accredited by NAAC with A+ Grade and NBA under Tier-1

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2024-2025

NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

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CERTIFICATE

This is to certify that MUVVALI TRIVENI, Roll No: 23471A05I2, 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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GENERATING FIRST N PRIME NUMBERS

AIM:

C Program to Generate First N Prime Numbers Where N is Given by User

```
#include <stdio.h>
void main()
{
  int n,count=0,i;
  int num=2;
  printf("Enter the number to generate :");
  scanf("%d",&n);
  printf("prime numbers up to %d numbers are : ",n);
  while(count<n)
  {
     for(i=2;i*i<=num;i++)
     {
        if(num%i==0)
        {
           break;
        }
     }
     if(i*i>num && num>1)
     {
        printf("%d\t",num);
        count++;
      }
     num++;
    }
    printf("\n");
  }
```

Input:

Enter the number to generate : 5

Output:

prime numbers up to 5 numbers are : 2 3 5 7 11

```
enter the number to generate :5
prime numbers  up to 5 numbers are : 2  3      5      7      11
```

To check string palindrome without string handling functions

AIM:

C Program to Check String Palindrome Without Using String Handling Functions

```
#include<stdio.h>
int main()
{
   char str[100];
   int start,end,i=0;
   printf("Enter a string :");
   scanf("%s",str);
   while(str[i]!='\0')
   {
      i++;
   }
   start=0;
   end=i-1;
   while(start<end)
   {
      if(str[start]!=str[end])
      {
         printf("%s is not a palindrome\n",str);
      }
      start++;
      end--;
   }
   printf("%s is a palindrome\n",str);
   return 0;
}
```

Input:

Enter a string :

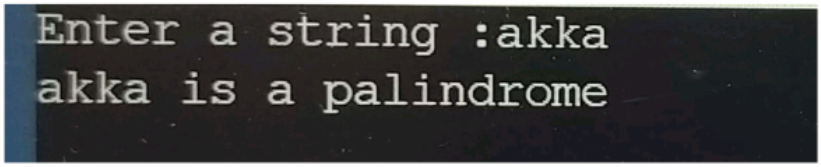
akka

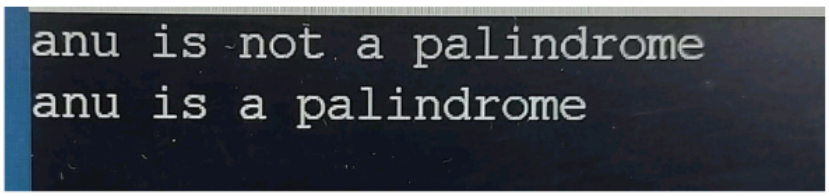
anu

Output:

akka is a palindrome

anu is not a palindrome





To search a number and count it repetition in an array

AIM:

Twenty-five numbers are entered from the keyboard into an array. The number to be searched is entered through the keyboard by the user. Write a program to find if the number to be searched is present in the array and if it is present, display the number of times it appears in the array.

```
#include <stdio.h>
int main()
{

 int num[25];
 int search,i;
 int c=0;
 printf("Enter 25 numbers in array:");
 for(i=0;i<25;i++)
{
    scanf("%d",&num[i]);
 }
 printf("Enter the number to search :\n");
 scanf("%d",&search);
 for(i=0;i<25;i++){
    if(num[i]==search){
       c++;
    }
 }
 if(c>0)
{
    printf("the number %d is present in the array in %d times\n",search,c);
 }
 else
{
    printf("the number %d is not present in the array\n",search);
 }
return 0;
 }
```

Input:

Enter 25 numbers in array:

23 43 53 64 77 88 99 23 13 48 61 23 59 74 0 4 23 49 19 4 23 58 22 23 50

Enter the number to search : 23

Output:

The number 23 is present in the array in 6 times