



PROJECT OF PFO

PALINDROME CHECK USING STRING REVERSE



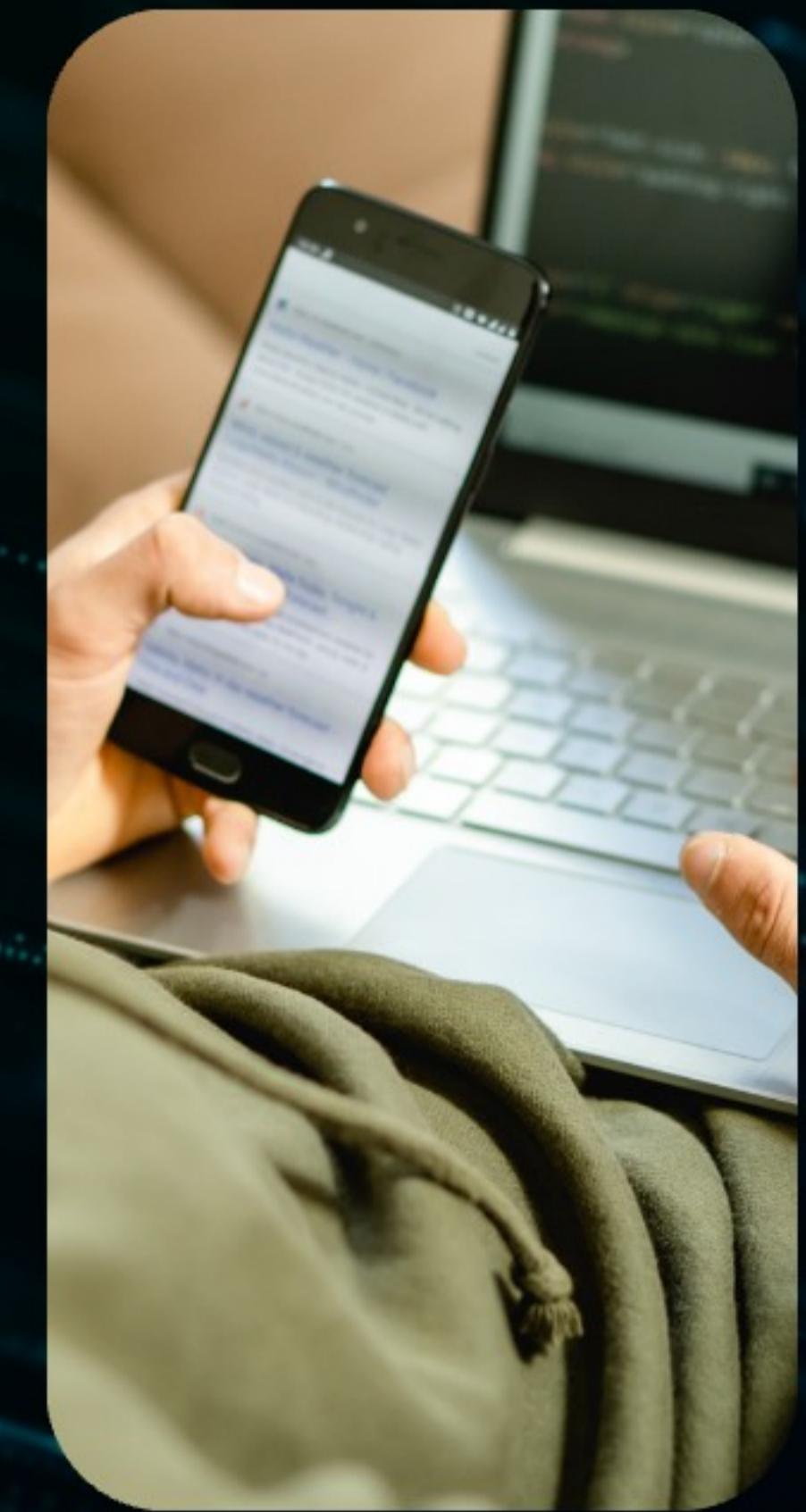
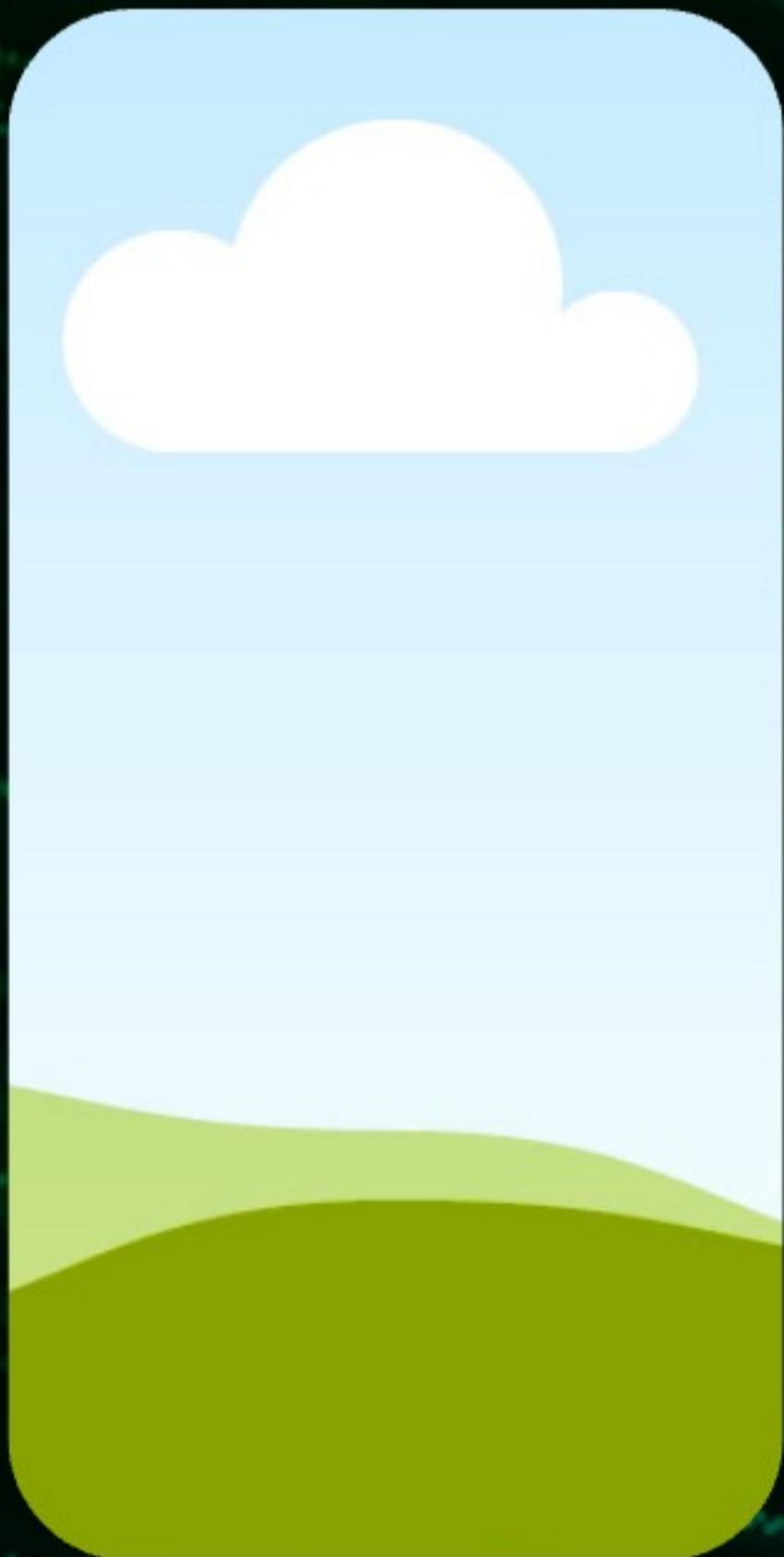
Prepared by
Ayush kumar singh
ERP-10350

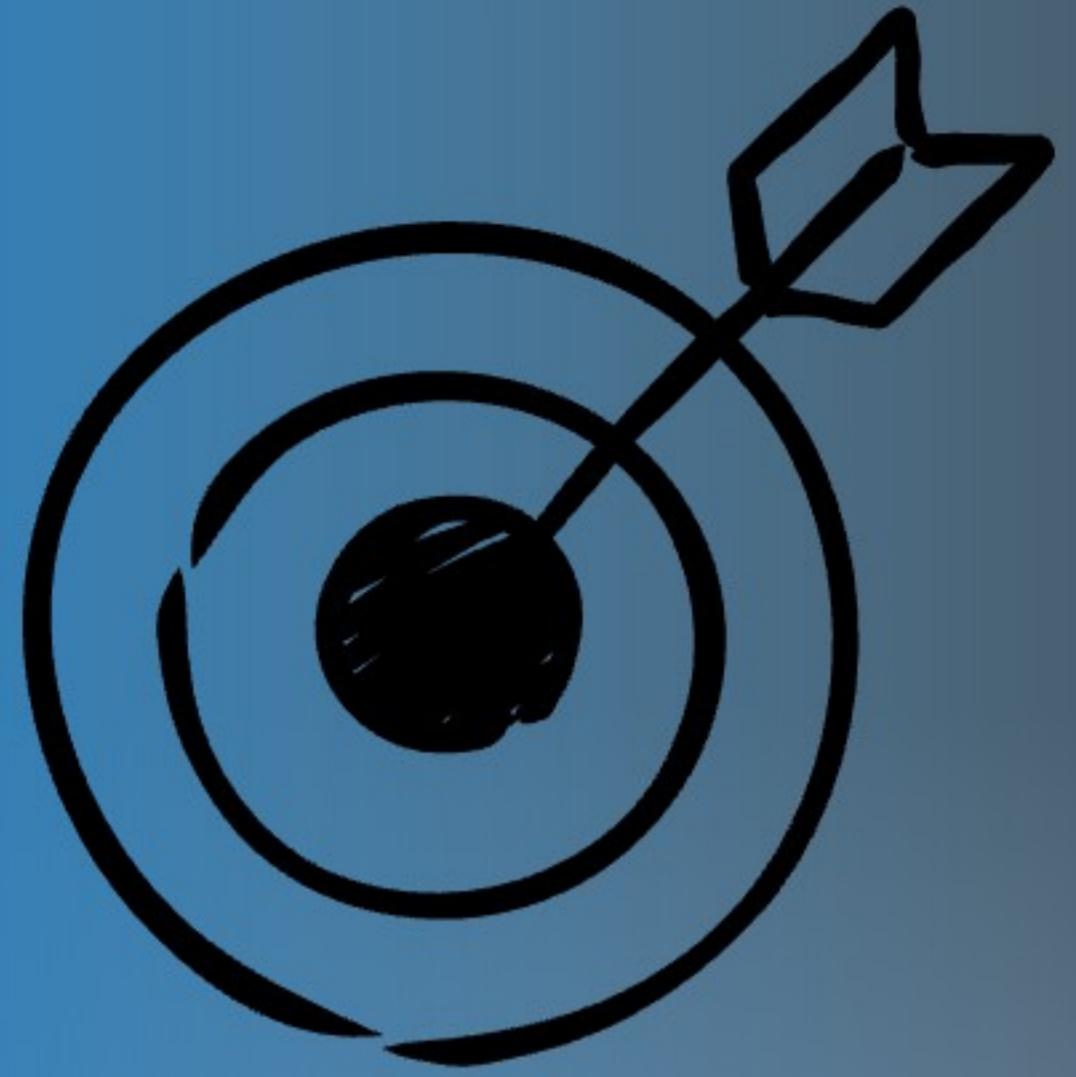
Presented to
Mrs Naina devi

```
background: url("https://www.w3schools.com/html/images/html5_bird.jpg");
background-size: 100vw 100vh;
}
.box{
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    width: 400px;
    padding: 40px;
    background: rgba(0, 0, 0, 0.5);
    border: 2px solid #fff;
    border-radius: 10px;
    box-sizing: border-box;
    overflow: hidden;
    margin: 0 0 30px;
    padding: 0;
    color: #fff;
    text-align: center;
}
.box h3{
    margin: 0 0 10px;
    padding: 0;
    color: #fff;
    text-align: center;
}
.box .inputp...  
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```

AGENDA

- 01. PROJECT INTRODUCTION**
- 02. PROBLEM STATEMENT**
- 03. TOOLS & TECHNOLOGIES**
- 04. PROJECT LINKING (CODE + OUTPUT)**
- 05. WORKING OF PROJECT**
- 06. APPLICATIONS**
- 07. ADVANTAGES**
- 08. FUTURE SCOPE**





Introduction to Project

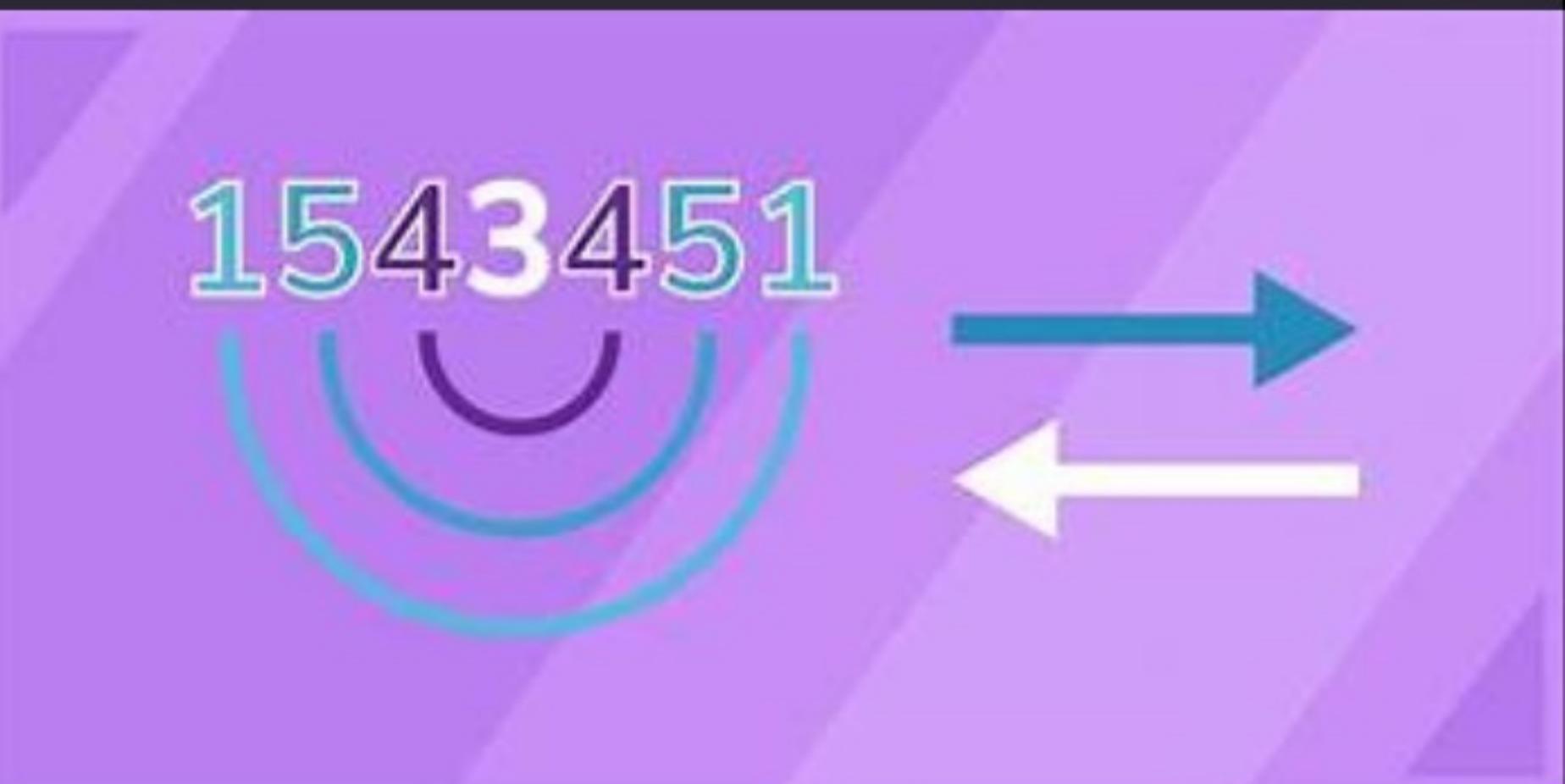


01 A palindrome is a string that reads the same forward and backward.

02 This project is based on checking whether a given string is a palindrome.

03 The program is written in C using string operations.

04 It helps in understanding functions and string handling in C.



PROBLEM STATEMENT

To design a C program that:

01. Accepts a string from user

02. Reverses the string

03. Checks palindrome condition

04. Displays result



Tools and Technology used :-

Programming Language: C



IDE: Visual Studio Code



Compiler: GCC



Operating System: Windows



GITHUB- To store and share project

PROGRAM CODE

>**The program uses a user-defined function to reverse the string.**

>**strlen() is used to find the length of the string.**

>**A loop is used to reverse the string character by character.**

>**The main function compares both strings and prints the result.**

```
C project.c  X

C: > Users > ayush kumar singh > OneDrive > Desktop > C-MINI-PROJECT-main > C-MINI-PROJECT-main > C project.c > 🗑 r

1 #include <stdio.h>
2
3 int main() {
4     char str[100], rev[100];
5     int i, len, flag = 1;
6
7     // Input string
8     printf("Enter a string: ");
9     gets(str); // (college-level mini project ke liye acceptable)
10
11    // Find length
12    len = strlen(str);
13
14    // Reverse string
15    for (i = 0; i < len; i++) {
16        rev[i] = str[len - i - 1];
17    }
18    rev[i] = '\0';
19
20    // Check palindrome
21    for (i = 0; i < len; i++) {
22        if (str[i] != rev[i]) {
23            flag = 0;
24            break;
25        }
26    }
27
28    // Output
29    printf("\nOriginal String: %s", str);
30    printf("\nReversed String: %s", rev);
31
32    if (flag == 1)
33        printf("\nResult: It is a Palindrome String");
34    else
35        printf("\nResult: It is NOT a Palindrome String");
36
37    printf("\n\nMade by Ayush Kumar Singh (IBM A)");
38
39    return 0;
40 }
```



PROGRAM OUTPUT

Palindrome String

```
Enter a string: level
```

```
Original String: level
```

```
Reversed String: level
```

```
Result: It is a Palindrome String
```

```
Made by Ayush Kumar Singh (IBM A)
```

```
PS C:\Users\ayush kumar singh\OneDrive\Desktop\C-MINI-PROJECT-main\C-MINI-PROJECT-main>
```

Not Palindrome String

```
Enter a string: ayush
```

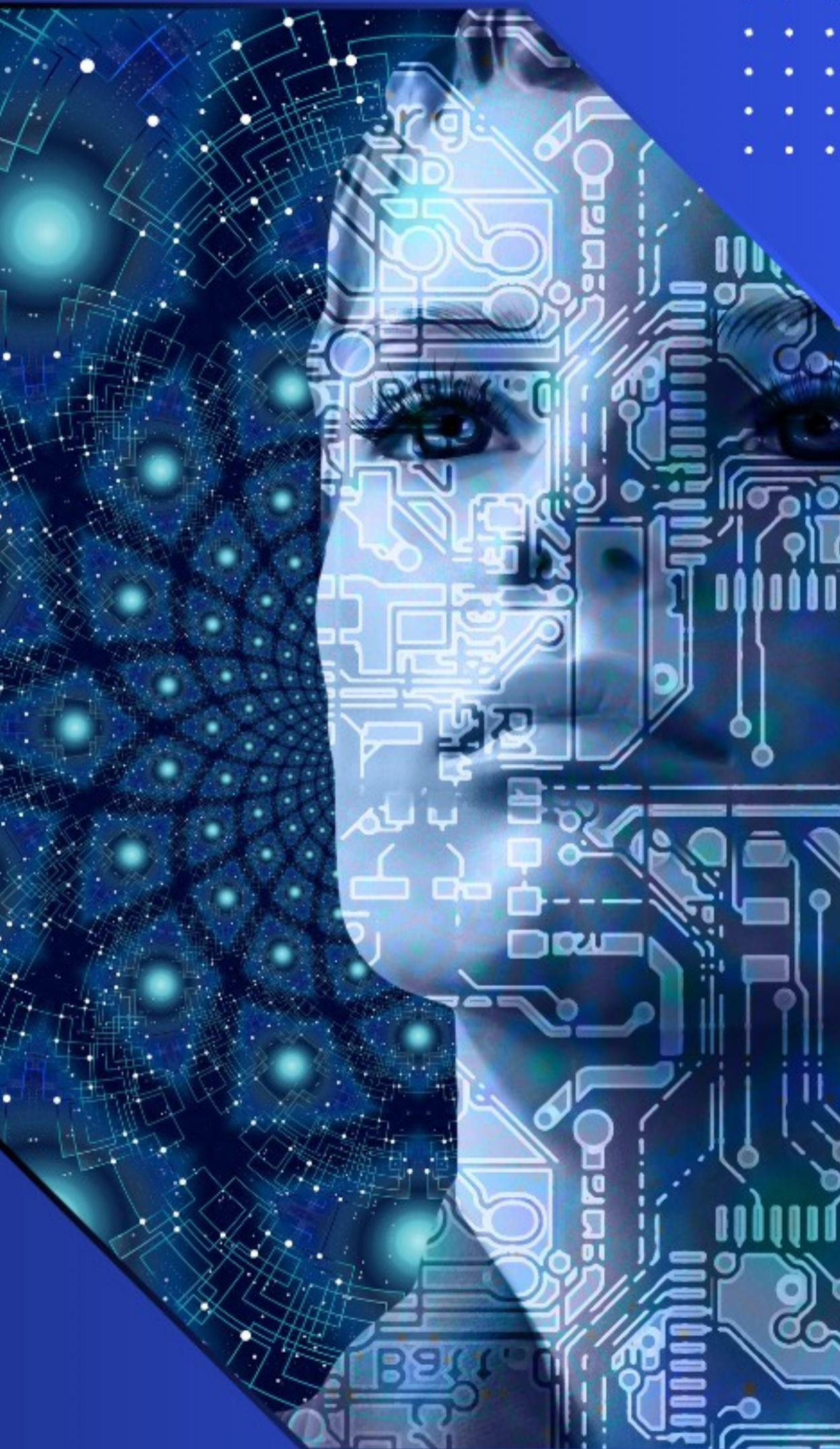
```
Original String: ayush
```

```
Reversed String: hsuya
```

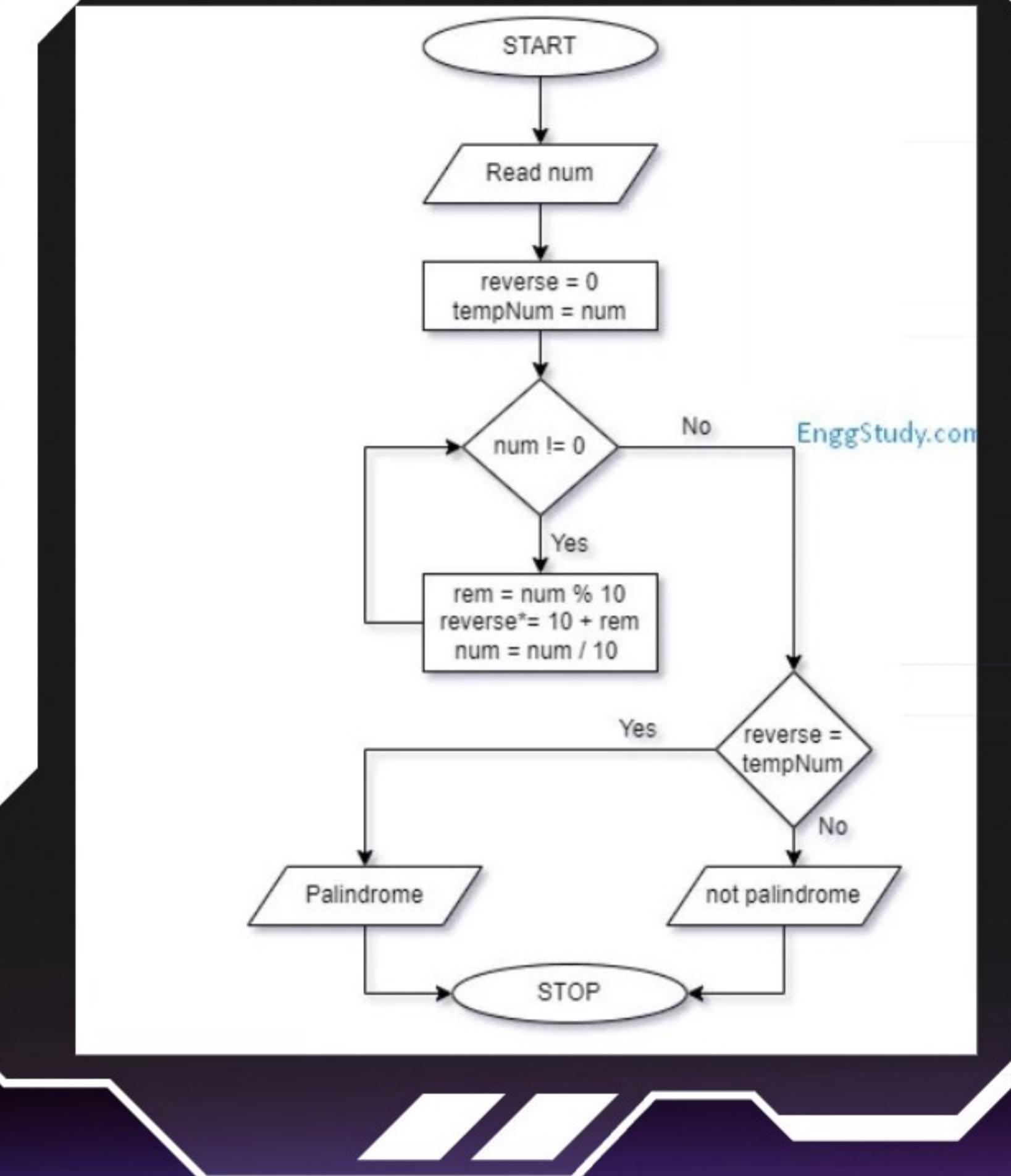
```
Result: It is NOT a Palindrome String
```

```
Made by Ayush Kumar Singh (IBM A)
```

```
PS C:\Users\ayush kumar singh\OneDrive\Desktop\C-MINI-PROJECT-main\C-MINI-PROJECT-main>
```



PROJECT WORKING



- 01. The user enters a string.**
- 02. The string is passed to a user-defined function.**
- 03. The function reverses the string.**
- 04. The reversed string is compared with the original string.**
- 05. If both strings are same, it is a palindrome.**
- 06. Otherwise, it is not a palindrome.**

APPLICATIONS

01. USED IN TEXT PROCESSING PROGRAMS.

02. USEFUL IN DATA VALIDATION.

03. APPLIED IN PATTERN RECOGNITION PROBLEMS.

04. HELPS IN LEARNING STRING MANIPULATION CONCEPTS



ADVANTAGES & FUTURE SCOPE

Advantages

- Easy to understand and implement.
- Uses simple logic and functions.
- Improves knowledge of strings in C.

Future Scope

- Can be extended for numbers and sentences.
- Can ignore spaces and special characters.
- Can be implemented in other programming languages.



THANK YOU!

