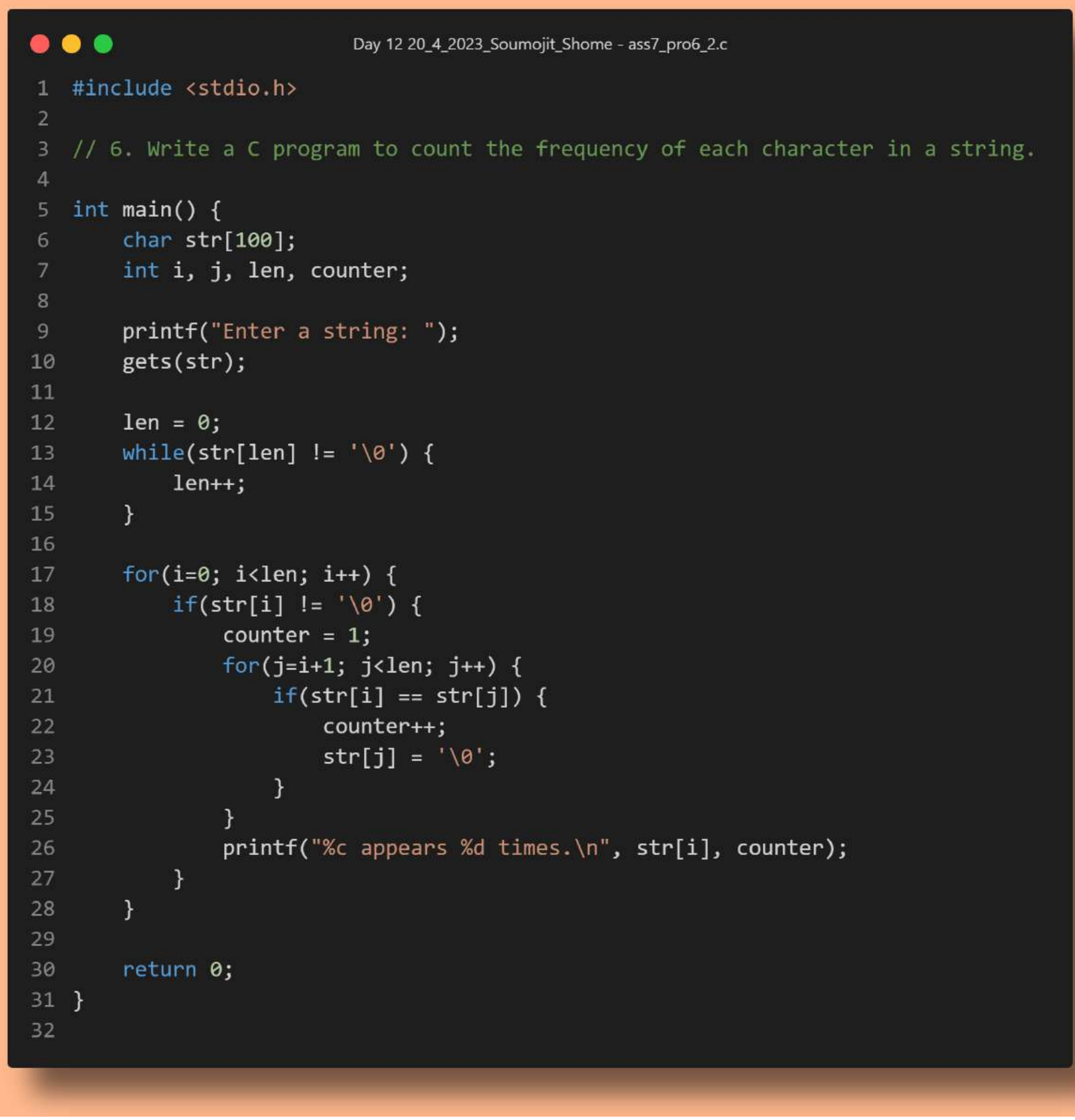
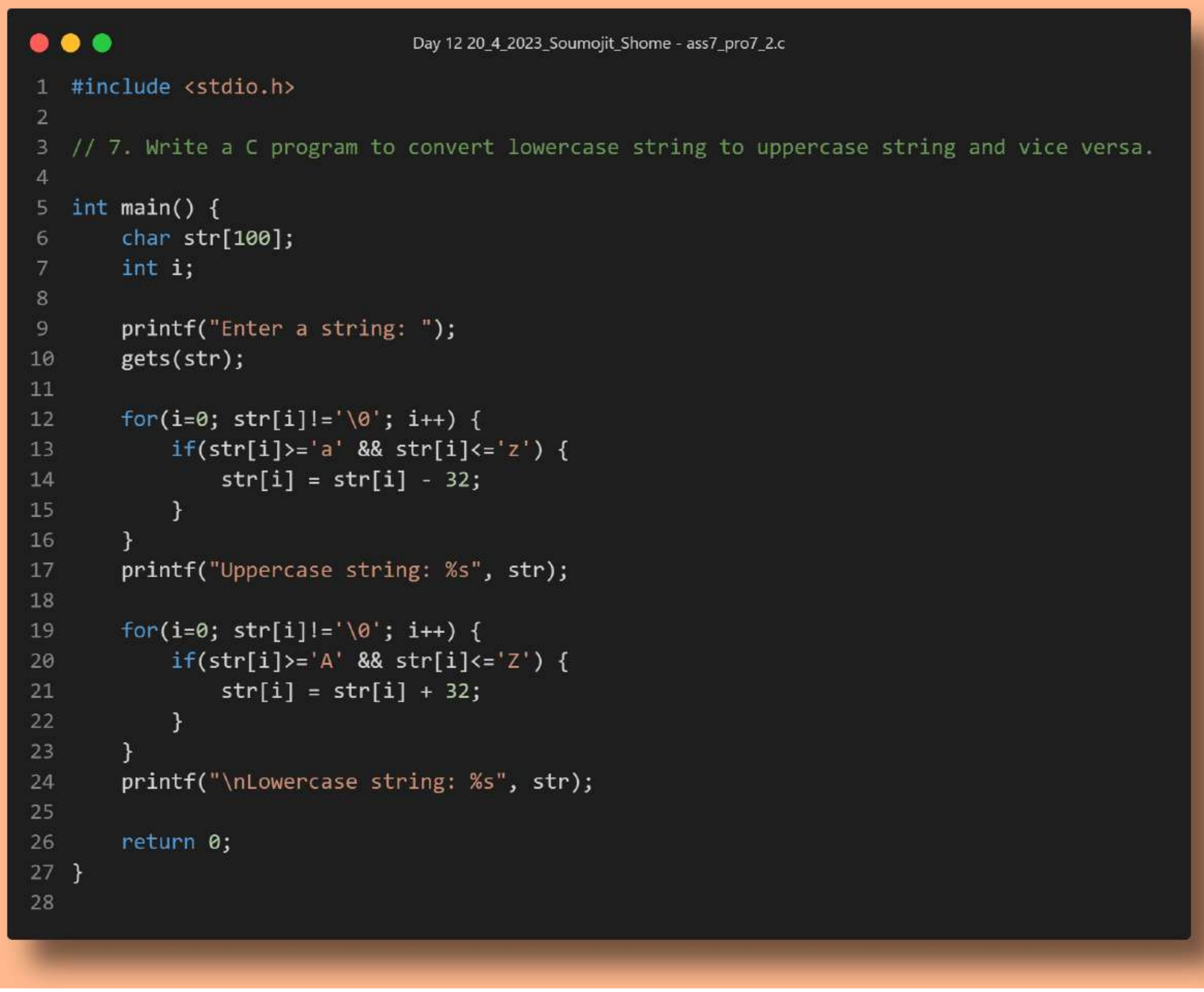
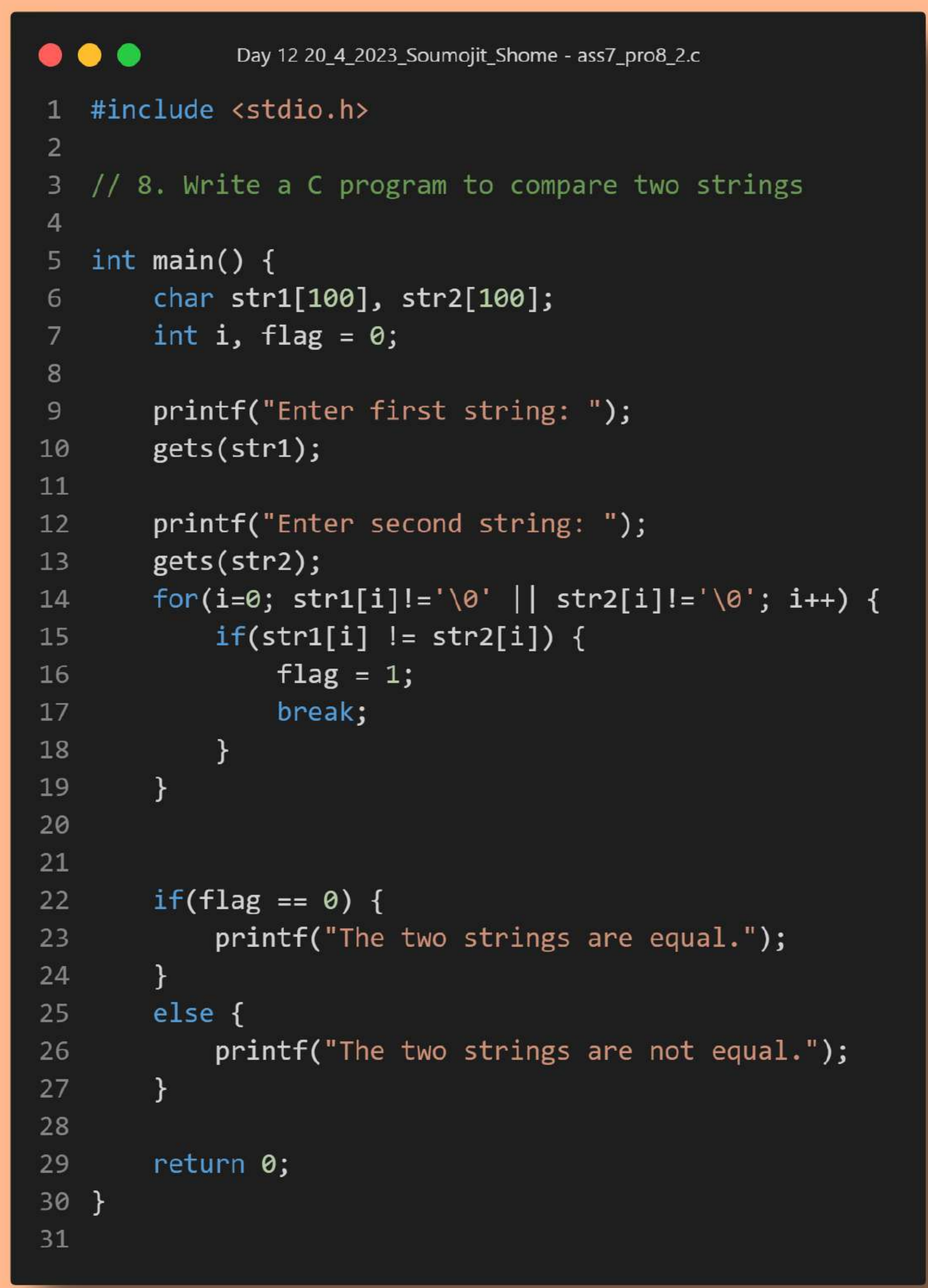


Day 12 20_4_2023_Soumojit_Shome - ass7_pro6_2.c

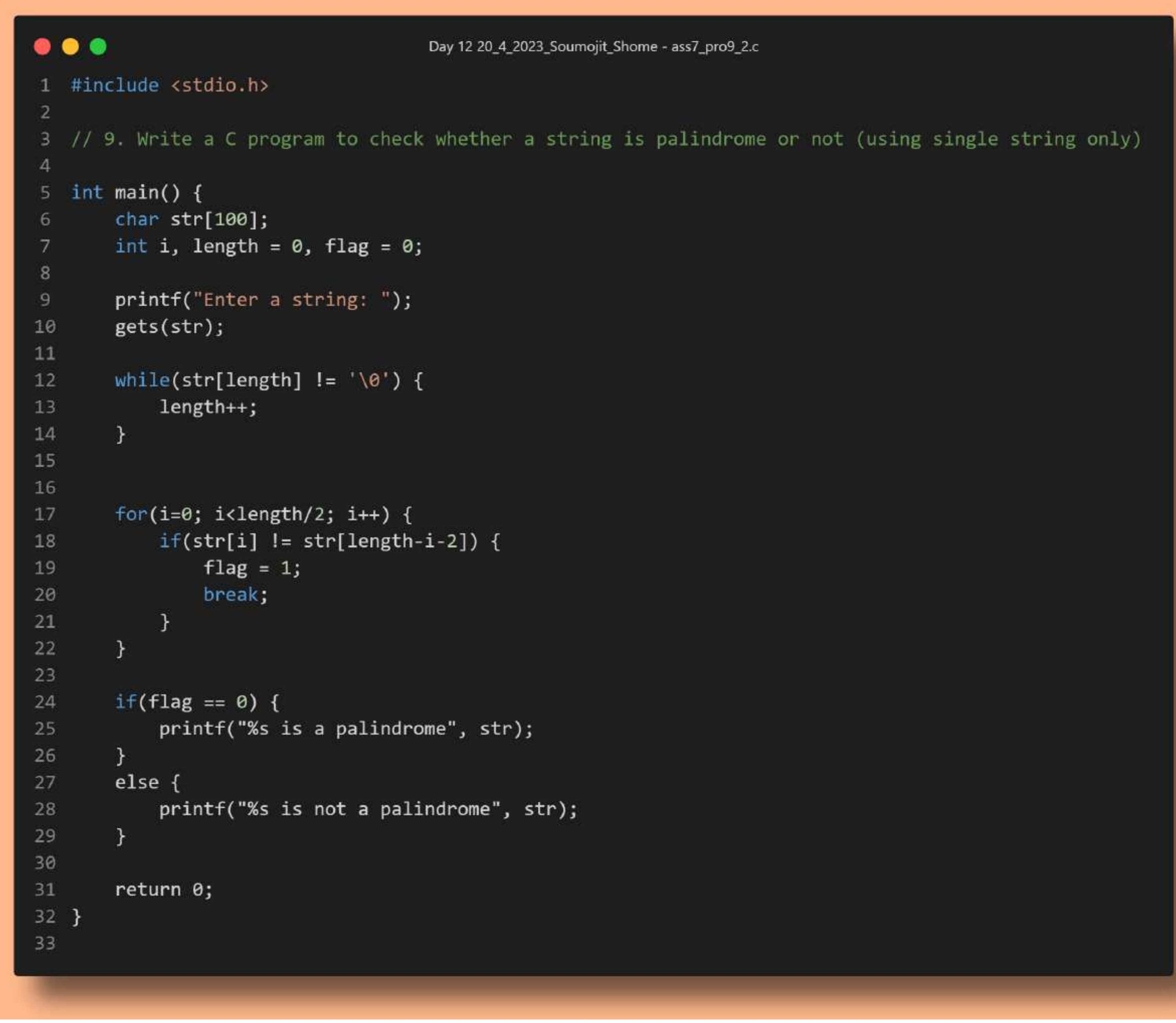
```c
#include <stdio.h>

// 6. Write a C program to count the frequency of each character in a string.

int main() {
    char str[100];
    int i, j, len, counter;

    printf("Enter a string: ");
    gets(str);

    len = 0;
    while(str[len] != '\0') {
        len++;
    }

    for(i=0; i<len; i++) {
        if(str[i] != '\0') {
            counter = 1;
            for(j=i+1; j<len; j++) {
                if(str[i] == str[j]) {
                    counter++;
                    str[j] = '\0';
                }
            }
            printf("%c appears %d times.\n", str[i], counter);
        }
    }

    return 0;
}

```



```c
#include <stdio.h>

// 7. Write a C program to convert lowercase string to uppercase string and vice versa.

int main() {
    char str[100];
    int i;

    printf("Enter a string: ");
    gets(str);

    for(i=0; str[i]!='\0'; i++) {
        if(str[i]>='a' && str[i]<='z') {
            str[i] = str[i] - 32;
        }
    }
    printf("Uppercase string: %s", str);

    for(i=0; str[i]!='\0'; i++) {
        if(str[i]>='A' && str[i]<='Z') {
            str[i] = str[i] + 32;
        }
    }
    printf("\nLowercase string: %s", str);

    return 0;
}

```

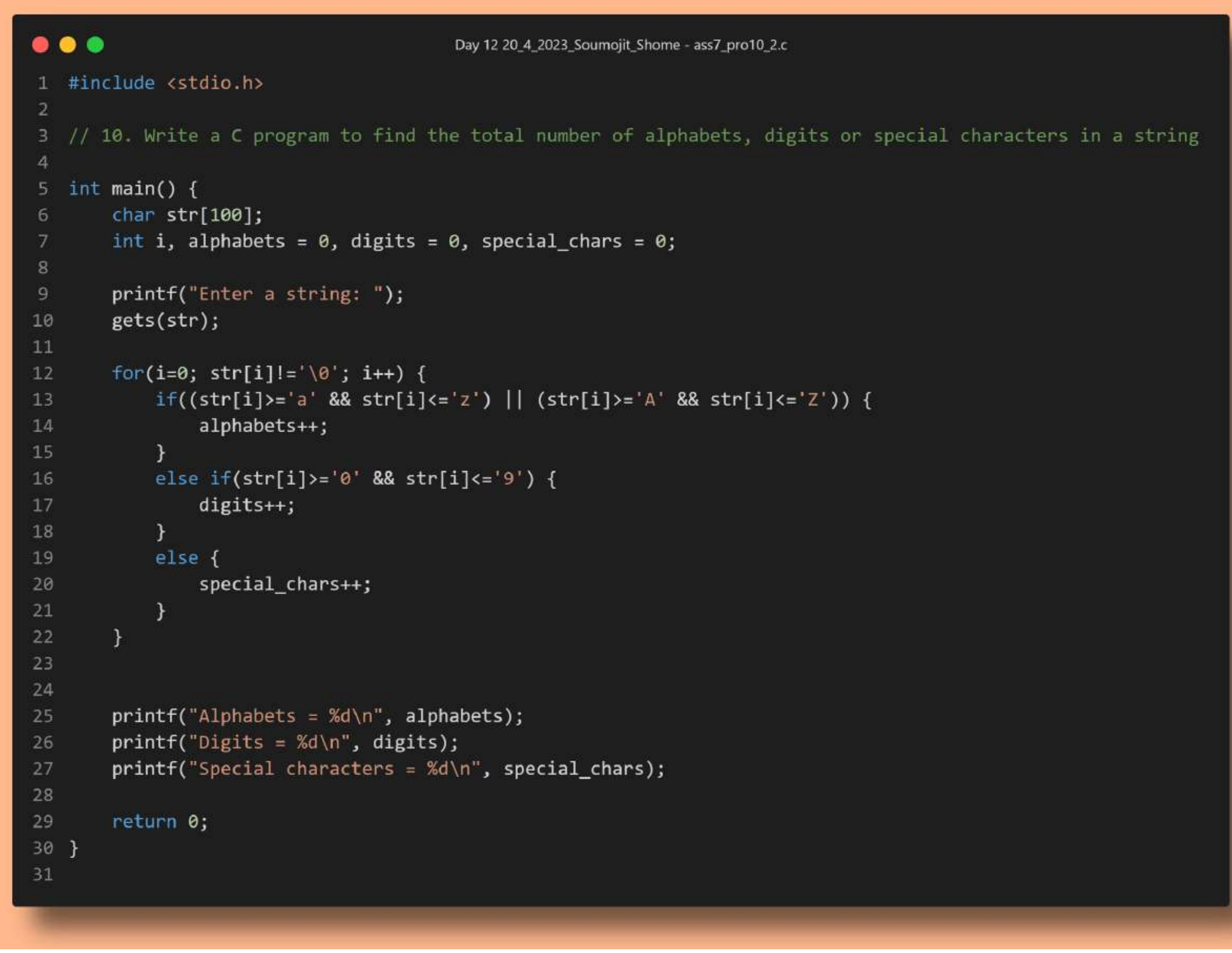


```c
#include <stdio.h>

// 8. Write a C program to compare two strings

int main() {
    char str1[100], str2[100];
    int i, flag = 0;

    printf("Enter first string: ");
    gets(str1);

    printf("Enter second string: ");
    gets(str2);
    for(i=0; str1[i]!='\0' || str2[i]!='\0'; i++) {
        if(str1[i] != str2[i]) {
            flag = 1;
            break;
        }
    }


    if(flag == 0) {
        printf("The two strings are equal.");
    }
    else {
        printf("The two strings are not equal.");
    }

    return 0;
}

```



Day 12 20_4_2023_Soumojit_Shome - ass7_pro9_2.c

```c
#include <stdio.h>

// 9. Write a C program to check whether a string is palindrome or not (using single string only)

int main() {
    char str[100];
    int i, length = 0, flag = 0;

    printf("Enter a string: ");
    gets(str);

    while(str[length] != '\0') {
        length++;
    }


    for(i=0; i<length/2; i++) {
        if(str[i] != str[length-i-2]) {
            flag = 1;
            break;
        }
    }

    if(flag == 0) {
        printf("%s is a palindrome", str);
    }
    else {
        printf("%s is not a palindrome", str);
    }

    return 0;
}

```



```c
#include <stdio.h>

// 10. Write a C program to find the total number of alphabets, digits or special characters in a string

int main() {
    char str[100];
    int i, alphabets = 0, digits = 0, special_chars = 0;

    printf("Enter a string: ");
    gets(str);

    for(i=0; str[i]!='\0'; i++) {
        if((str[i]>='a' && str[i]<='z') || (str[i]>='A' && str[i]<='Z')) {
            alphabets++;
        }
        else if(str[i]>='0' && str[i]<='9') {
            digits++;
        }
        else {
            special_chars++;
        }
    }


    printf("Alphabets = %d\n", alphabets);
    printf("Digits = %d\n", digits);
    printf("Special characters = %d\n", special_chars);

    return 0;
}

```