

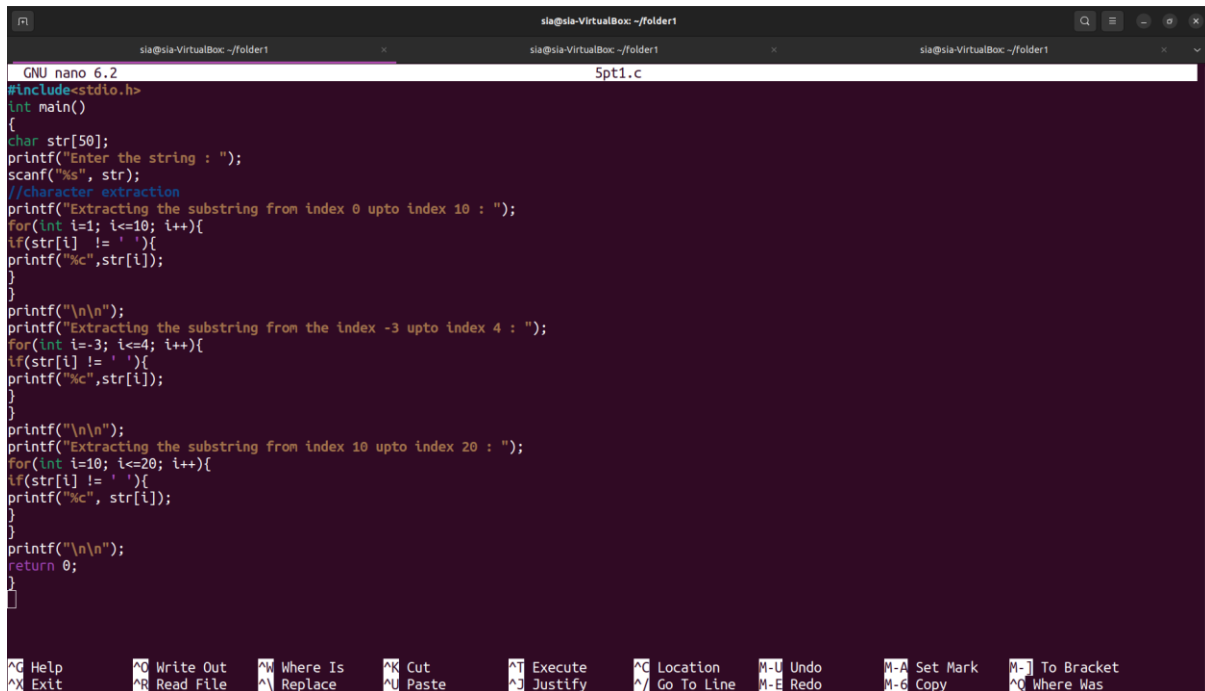
## Experiment - 5

Write a shell script and C program to perform the following string operations:

a) To extract a substring from a given string.

b) To find the length of a given string.

Compare the running time of above shell script and C program using the time command.



```
GNU nano 6.2 spt1.c
#include<stdio.h>
int main()
{
    char str[50];
    printf("Enter the string : ");
    scanf("%s", str);
    //character extraction
    printf("Extracting the substring from index 0 upto index 10 : ");
    for(int i=1; i<=10; i++){
        if(str[i] != ' '){
            printf("%c",str[i]);
        }
    }
    printf("\n\n");
    printf("Extracting the substring from the index -3 upto index 4 : ");
    for(int i=-3; i<=4; i++){
        if(str[i] != ' '){
            printf("%c",str[i]);
        }
    }
    printf("\n\n");
    printf("Extracting the substring from index 10 upto index 20 : ");
    for(int i=10; i<=20; i++){
        if(str[i] != ' '){
            printf("%c", str[i]);
        }
    }
    printf("\n\n");
    return 0;
}
```



```
GNU nano 6.2 spt2.c
#include<stdio.h>
#include<string.h>
int main(){
    int a;
    char str[1000];
    printf("Enter the string : ");
    scanf("%s",str);
    a=strlen(str);
    printf("Length of string : %d\n", a);
}
```

```
sia@sia-VirtualBox: ~/folder1
sia@sia-VirtualBox: ~/folder1$ chmod +x 5pt0.sh
sia@sia-VirtualBox: ~/folder1$ ./5pt0.sh
Enter the string :
hello. my name is sia. i am in 3rd sem.
Extraction upto 10 characters :
hello. my
Extraction from specific character :
. my name is sia. i am in 3rd sem.
Extraction from between :
. my na
sia@sia-VirtualBox: ~/folder1$ chmod +x 5pt2.sh
sia@sia-VirtualBox: ~/folder1$ ./5pt2.sh
Total characters in the string are : 27
sia@sia-VirtualBox: ~/folder1$ nano 5pt2.sh
sia@sia-VirtualBox: ~/folder1$ nano 5pt2.sh
sia@sia-VirtualBox: ~/folder1$ chmod +x 5pt2.sh
sia@sia-VirtualBox: ~/folder1$ ./5pt2.sh
Enter the string
hello my name is sia i am in 3rd sem
Length of the string is : 36
sia@sia-VirtualBox: ~/folder1$
```