Experiment 5:

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

(a). To extract a substring from a given array

C program:-

```c
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;
}
```

Shell script:-

```
haripriya@LAPTOP-RMAP14VO:~$ nano 5b.sh
haripriya@LAPTOP-RMAP14VO:~$ cat 5b.sh
str="Welcome to CSE department OS lab"
echo "Total characters in this string are : ${#str}"

haripriya@LAPTOP-RMAP14VO:~$ chmod +x 5b.sh
haripriya@LAPTOP-RMAP14VO:~$ ./5b.sh
Total characters in this string are : 32
haripriya@LAPTOP-RMAP14VO:~$
```

(b). To find the length of the given string

```
haripriya@LAPTOP-RMAP14VO:~$ cd /mnt/d/Documents
haripriya@LAPTOP-RMAP14VO:/mnt/d/Documents$ nano 5.sh
haripriya@LAPTOP-RMAP14VO:/mnt/d/Documents$ nano 5b.sh
haripriya@LAPTOP-RMAP14VO:/mnt/d/Documents$ chmod +x 5b.sh
haripriya@LAPTOP-RMAP14VO:/mnt/d/Documents$ ./5b.sh
Enter the string :
Welcome to CSE dept OS lab
Extraction upto 10 characters :
Welcome to
Extraction from specific character
me to CSE dept OS lab
EXtraction from between
me to C
haripriya@LAPTOP-RMAP14VO:/mnt/d/Documents$
```