Experiment – 5

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

a) To extract a substring from a given string.

Code:

STR="WELCOME TO MIET"

echo ${STR:3:5}

```
student@student-virtual-machine:~$ gedit test1.sh
student@student-virtual-machine:~$ chmod +x test1.sh
student@student-virtual-machine:~$ ./test1.sh
COME
student@student-virtual-machine:~$
```
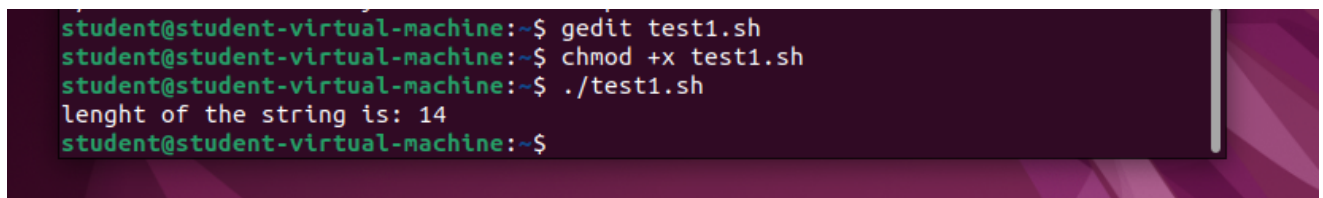
b) To find the length of a given string.

Code:

str="this is a string"

n=${#str}

echo "Length of the string is: $n"

```
student@student-virtual-machine:~$ gedit test1.sh
student@student-virtual-machine:~$ chmod +x test1.sh
student@student-virtual-machine:~$ ./test1.sh
lenght of the string is: 14
student@student-virtual-machine:~$
```

c) To extract a substring from a given string using C program.

```c
1 #include<stdio.h>
2 #include<stdlib.h>
3 int main()
4 {
5 char str[20];
6 printf("Enter the string: ");
7 scanf("%s",str);
8 printf("Printing the characters\n");
9 for(int i=0;str[i]!='\0';i++)
10 {
11 if(str[i]!=' ')
12 {
13 printf("%c\n",str[i]);
14 }
15 }
16 return 0;
17 }
```

```
student@student-virtual-machine:~$ ./test
Enter the string: This
Printing the characters
T
h
i
s
student@student-virtual-machine:~$
```

d) To find the length of a given string using C program.

```c
1 #include<stdio.h>
2 #include<string.h>
3 int main()
4 {
5 char str[100];
6 int i;
7 printf("Enter the string: ");
8 scanf("%s",str);
9 printf("Length of the string is %ld\n",strlen(str));
10 return 0;
11 }
```

```
student@student-virtual-machine:~$ ./test2
Enter the string: This
Length of the string is 4
student@student-virtual-machine:~$
```