Pre-requisite Practical 1

Definition: Write a program to print the string “This is the practical session of system programming”

Code:

```
#include<stdio.h>
#include<conio.h>
void main(){
	char s1[80];
	clrscr();
	printf("Enter string:");
	gets(s1);
	puts(s1);
	getch();
}
/*
Output
Enter string:This is first practical session of system programming
This is first practical session of system programming
*/
```

Pre-requisite Practical 2

Definition: Write a program to print the paragraph

Code:

```
#include<stdio.h>
#include<conio.h>
void main(){
        char p1[80];
        clrscr();
        printf("Enter the paragraph ending with $:");
        scanf("%[^$]s",&p1);
        printf("\n %s",p1);
        getch();
}
/*
Output
Enter the paragraph ending with $:C language provides facility of file input-out
put operations$

 C language provides facility of file input-output operations
*/
```

Pre-requisite Practical 3

Definition: Write a program to implement following user defined functions

Length of string

Copy one string to another

Concatenate two strings

Compare two strings

Reverse the string

Code:

```
#include<stdio.h>
#include<conio.h>
int len1(char[]);
void copy1(char[],char[]);
void concat1(char[],char[]);
int comp1(char[],char[]);
void rev1(char[]);
void main() {
        char s1[20],s2[20],c1[20],c2[20],r[20];
        int c,d;
        clrscr();
        printf("Enter the string:");
        gets(s1);
        c = len1(s1);
        printf("\n Length is %d",c);
        printf("\n Enter second string:");
        gets(s2);
        copy1(s2,s1);
```

```
	printf("\n Copied string is %s",s2);
	printf("\n Enter string to concate:");
	gets(c1);
	concat1(s1,c1);
	printf("\n Enter two strings to compare:");
	gets(c2);
	gets(r);
	printf("\n Comparison:");
		if(comp1(c2,r) == 0)
			printf("\n Same");
		else
			printf("\n Different");

	printf("\n Reversed string: ");
	rev1(s1);
	getch();
}
int len1(char s1[]){
	int i;
	for(i=0;s1[i] != '\0'; i++);
	return i;
}
void copy1(char s2[],char s1[]){
	int i;
	for(i=0;s1[i]!='\0'; i++){
		s2[i] = s1[i];
	}
```

```
        s2[i] = '\0';
}

void concat1(char s1[],char c1[]){
        int i,j;
        for(i=len1(s1), j=0; c1[j]!='\0';i++,j++){
                s1[i] = c1[j];
        }
        s1[i] = '\0';
        printf("\n Concated string is %s",s1);
}
int comp1(char c2[], char r[]){
        int c = 0;
        while(c2[c] == r[c]){
                if(c2[c] == '\0'|| r[c] == '\0')
                break;
                c++;
        }
        if(c2[c] == '\0' && r[c] == '\0')
                return 0;
        else
                return -1;
}
void rev1(char s1[]){
        int i;
        for(i=len1(s1); i>=0; i--){
                printf("%c",s1[i]);
```

```
        }
}
```

```
/*
Output
Enter the string:Rahul

 Length is 5
 Enter second string:soni

 Copied string is Rahul
 Enter string to concate:soni

 Concated string is Rahulsoni
 Enter two strings to compare:hello
rahul

 Comparison:
 Different
 Reversed string: inosluhaR
 */
```

Pre-requisite Practical 4

Definition: Write a program to count characters and spaces from given string.

Code:

```
#include<stdio.h>
#include<conio.h>
void main(){
	char s1[50];
	int c;
	clrscr();
	printf("Enter string till $:");
	scanf("%[^$]s",&s1);
	c=len1(s1);
	printf("Total number of characters and spaces are %d",c);
	getch();

}
int len1(char s1[]){
	int i;
	for(i=0; s1[i]!='\0';i++);
	return i;
}

/*
Output
Enter string:hello world
Total number of characters and spaces are 11
*/
```

Pre-requisite Practical 5

Definition: Write a program to read data from keyboard, write it to a file called STUDENT.txt. Again read the data from the file STUDENT.txt and display on the screen

Code:

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
struct stud
{
        int rno;
        char nm[100];
};
void main()
{
        struct stud *s;
        int n,i;
        char ch;
        FILE *fp;
        clrscr();
        printf("Enter record numbers: ");
        scanf("%d",&n);
        s=(struct stud *)malloc(n*sizeof(struct stud));
        fp=fopen("STUDENT.txt","w");
        for(i=0;i<n;i++)
        {
            printf("\n\tInformation for student : %d\n",i+1);
```

```
            printf("Enter Roll No : ");
            scanf("%d",&s[i].rno);
            printf("Enter Name : ");
            fflush(stdin);
            gets(s[i].nm);
            fprintf(fp,"%5d %-20s\n",s[i].rno,s[i].nm);
        }
        fclose(fp);
        fp=fopen("STUDENT.txt","r");
        printf("\nContent of the STUDENT.txt file is\n");
        printf("Roll No  Name\n");
        printf("--------------------------\n");
        do{
                ch = fgetc(fp);
                putchar(ch);
}
        while(ch != EOF);
        fcloseall();
        getch();
 }
```

```
/*
 Output
 Enter record numbers: 3

        Information for student : 1
Enter Roll No : 1
Enter Name : rahul

        Information for student : 2
Enter Roll No : 2
Enter Name : yash

        Information for student : 3
Enter Roll No : 3
Enter Name : vikash

Content of the STUDENT.txt file is
Roll No  Name
-------------------------
   1 rahul
   2 yash
   3 vikash
*/
```