# 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:**

```c
#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];

        }
```

```c
        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:**

```c
#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);
```

```c
        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 STUD.txt file is

Roll No  Name

---------------------------

   1 rahul

   2 yash

   3 vikash

*/
```