

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 STUD.txt file is

Roll No Name

1 rahul

2 yash

3 vikash

```
*/
```

