```
Practical Title
Sr.
     Write a program to that performs as calculator (addition, multiplication, division, subtraction).
1
            #include<stdio.h>
            #include<conio.h>
            void main()
            int a,b,c;
            clrscr();
            printf("Enter two numbers:\n");
            scanf("%d %d",&a,&b);
            c=a+b;
            printf("Addition=%d\n",c);
            printf("Subtraction=%d\n",c);
            c=a*b;
            printf("Multiplication=%d\n",c);
            c=a/b;
            printf("Division_Q=%d\n",c);
            c=a%b;
            printf("Division_R=%d\n",c);
            getch();
             Write a program to find area of triangle(a=h*b*.5)
     a = area
     h = height
     b = base
     #include<stdio.h>
             #include<conio.h>
             void main()
             float h,b,a;
             clrscr();
             printf("Enter height and base of triangle:\n");
             scanf("%f %f",&h,&b);
             a= h * b * 0.5;
             printf("Area=%f\n",a);
             getch();
3
     Write a program to calculate simple interest (i = (p*r*n)/100)
     i = Simple interest
```

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     p = Principal amount
     r = Rate of interest
     n = Number of years
            #include<stdio.h>
            #include<conio.h>
            main()
            {
             float SI,P,N,R;
             clrscr();
             printf("Enter values of P, N and R: ");
             scanf("%f%f%f",&P,&N,&R);
             SI=(P*N*R)/100;
             printf("Simple interest = : %6.2f",SI);
             getch();
4
     Write a C program to interchange two numbers.
            #include<stdio.h>
            #include<conio.h>
            void main()
            int a,b,temp;
            clrscr();
            printf("Enter the value of a and b:\n");
            scanf("%d %d", &a, &b);
            printf("Before Interchange\n");
            printf("a= %d b=%d",a,b);
            temp=a;
            a=b;
            b=temp;
            printf("After Interchange\n");
            printf("a= %d b=%d",a,b);
            printf("Area=%f\n",a);
            getch();
     Write a C program to enter a distance in to kilometre and convert it in to meter, feet, inches and
     centimetre
            #include<stdio.h>
            #include<conio.h>
            void main()
            int km;
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            float m,feet,inch,cm;
            clrscr();
            printf("Enter km:\n");
            scanf("%d",&km);
            m=km*1000;
            feet=3.28084*m;
            inch=12*feet;
            cm=100*m;
            printf("Meter=%f\n",m);
            printf("Feet=%f\n",feet);
            printf("Inch=%f\n",inch);
            printf("Centimeter=%f\n",cm);
            getch();
            }
6
     Write a program to compute Fahrenheit from centigrade (f=1.8*c +32)
            #include<stdio.h>
            #include<conio.h>
            void main()
            float c,f;
            clrscr();
            printf("Enter temperature in degree C:\n");
            scanf("%f",&c);
            f=1.8*c+32;
            printf("F=\%f\n",f);
            getch();
            }
     Write a C program to find out distance travelled by the equation d = ut + 1/2*at^2
7
     #include<stdio.h>
     #include<conio.h>
     #include<math.h>
     void main()
      int i, n, sec;
      float d, u, a;
      clrscr();
       printf("Enter the no. of intervals\n");
      scanf("%d", &n);
       for(i = 1; i \le n; i++)
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         printf("interval: %d \n", i);
         printf("Enter the time in seconds \n");
         scanf("%d",&sec);
         printf("Enter the velocity \n");
         scanf("%f", &u);
         printf("Enter the acceleration \n");
         scanf("%f", &a);
         d = d + (u * sec + (a * (pow(sec, 2))) / 2);
       printf("Total distance travelled is %.2f", d);
       getch();
8
     Write a C program to find that the accepted number is Negative, or Positive or Zero.
             #include<stdio.h>
             #include<conio.h>
             void main()
             int a;
             clrscr();
             printf("Enter no.\n");
             scanf("%d",&a);
             if(a>0)
             printf("positive");
             else if(a==0)
             printf("zero");
             else
             printf("Negative");
             getch();
     Write a program to read marks of a student from keyboard whether the student is pass or fail(using if
     else)
             #include<stdio.h>
             #include<conio.h>
             void main()
             float marks;
             clrscr();
             printf("Enter student's marks:\n");
             scanf("%f",&marks);
```

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            if(marks > = 35)
                    printf("Pass");
            else
                    printf("Fail");
            getch();
10
     Write a program to read three numbers from keyboard and find out maximum out of these three.
     (nested if else)
            #include<stdio.h>
            #include<conio.h>
            void main()
            int a,b,c;
            clrscr();
            printf("Enter the three numbers:\n");
            scanf("%d %d %d",&a, &b, &c);
            if(a>b)
            {
                    if(a>c)
                           printf("Max=%d",a);
                    else
                            printf("Max=%d",c);
            }
            else
                    if(b>c)
                            printf("Max=%d",b);
                    else
                            printf("Max=%d",c);
            getch();
     Write a C program to check whether the entered character is capital, small letter, digit or any special
11
     character.
            #include<stdio.h>
            #include<conio.h>
            void main()
            char a;
```

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            clrscr();
            printf("Enter no.\n");
            scanf("%c",&a);
            if(isupper(a)>0)
            printf("Upper case");
            else if(islower(a)>0)
            printf("Lower case");
            if(isdigit(a)>0)
            printf("Digit");
            getch();
            }
12
     Write a program to read marks from keyboard and your program should display equivalent grade
     according to following table(if else ladder)
     Marks Grade
     100 - 80 Distinction
     79 - 60 First Class
     59 - 40 Second Class
     < 40 Fail
            #include<stdio.h>
            #include<conio.h>
            void main()
            int marks;
            clrscr();
            printf("Enter student's marks:\n");
            scanf("%d",&marks);
            if(marks<=100 && marks>=80)
                    printf("Distinction");
            else if(marks<=79 && marks>=60)
                    printf("First Class");
            else if(marks<=59 && marks>=40)
                    printf("Second Class");
            else
                    printf("Fail");
            getch();
13
     Write a c program to prepare pay slip using following data.
     Da = 10\% of basic, Hra = 7.50\% of basic, Ma = 300,
     Pf = 12.50\% of basic, Gross = basic + Da + Hra + Ma, Nt = Gross - Pf.
```

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            #include<stdio.h>
            #include<conio.h>
            void main()
            float da,hra,ma,pf,gross,nt,basic;
            clrscr();
            printf("Enter Basic:\n");
            scanf("%f", &basic);
            da=0.1*basic;
            hra=0.075 *basic;
            ma=300;
            pf=0.125*basic;
            gross= basic+da+hra+ma;
            nt=gross-pf;
            printf("Gross salary=%f\n",gross);
            printf("Net salary=%f",nt);
            getch();
            }
14
     Write a C program to read no 1 to 7 and print relatively day Sunday to Saturday.
     #include<stdio.h>
            #include<conio.h>
            void main()
              int n;
               clrscr();
               printf("Enter the number(1-7): ");
               scanf("%d", &n);
               switch(n)
                 case 1:
                   printf("Sunday");
                   break;
                 case 2:
                   printf("Monday");
                   break;
                 case 3:
                   printf("Tuesday");
                   break;
                 case 4:
                   printf("Wednesday");
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                   break;
                 case 5:
                   printf("Thursday");
                   break;
                 case 6:
                   printf("Friday");
                   break;
                 case 7:
                   printf("Saturday");
                   break;
                 default:
                   printf("Invalid input! Please enter the number between 1-7.");
              }
            getch();
15
    Write a C program to find out the Maximum and Minimum number from given 10 numbers
            #include<stdio.h>
            #include<conio.h>
            void main()
            int a,min,max,i,first;
            clrscr();
            printf("Enter first number:\n");
            scanf("%d",&first);
            min=first;
            max=first;
            printf("Enter remaining 9 numbers:\n");
            for(i=1;i<=9;i++)
            scanf("%d", &a);
            if (a>max)
                   max=a;
            if (a<min)
                   min=a;
            printf("Maximum=%d\n",max);
            printf("Minimum=%d",min);
            getch();
```

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     Write a C program to input an integer number and check the last digit of number is even or odd.
16
            #include<stdio.h>
            #include<conio.h>
            void main()
            int n;
            clrscr();
            printf("Enter n:\n");
            scanf("%d",&n);
            if(n\%2==0)
                    printf("Even Number");
            else
                    printf("Odd Number");
            getch();
17
     Write a C program to find factorial of a given number.
            #include<stdio.h>
            #include<conio.h>
            void main()
               int n, i, factorial = 1;
               clrscr();
               printf("Enter an integer: ");
               scanf("%d",&n);
                 for(i=1; i<=n; i++)
                   factorial = factorial*i;
                 printf("Factorial of %d = %d", n, factorial);
               }
            getch();
            }
18
     Write a program to reverse a number.
            #include<stdio.h>
            #include<conio.h>
```

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            void main()
             int num, sum, r;
             clrscr();
            printf("Enter number to be reversed:\n");
             scanf("%d",&num);
             sum=0;
             while(num>0)
             r=num %10;
             sum = sum *10 + r;
             num = num / 10;
             printf("Ans=%d", sum);
             getch();
19
     Write a program to generate first n number of Fibonacci series
             #include<stdio.h>
             #include<conio.h>
            void main()
             int n, a, b, c, i=1;
             clrscr();
             printf("Enter number of elements to be printed: \n");
             scanf("%d",&n);
             a=0;
             b=1;
             printf("Fibonacci Series: \n");
             printf("%d \t %d \t", a, b);
             while(i <= n-2)
            {
             c=a +b;
            printf("%d \t", c);
             a=b;
             b=c;
            i=i+1;
            getch();
```

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20
     Write a program to find out sum of first and last digit of a given number.
            #include<stdio.h>
            #include<conio.h>
            void main()
            int num, first digit, last digit, sum;
            clrscr();
            printf("Enter number:\n");
            scanf("%d",&num);
            first_digit=num %10;
            while(num>10)
            num = num / 10;
            last digit=num;
            sum=first_digit+last_digit;
            printf("Sum=%d", sum);
            getch();
21
     Write a C program to find the sum and average of different numbers which are accepted by user as
     many as user wants.
            #include<stdio.h>
            #include<conio.h>
            void main()
            float n,i,num,sum=0,avg;
            clrscr();
            printf("Enter total number to be computed:\n");
            scanf("%f",&n);
            printf("Enter Numbers:\n");
            for(i=1;i \le n;i++)
            scanf("%f",&num);
            sum=sum+num;
            avg= sum/n;
            printf("Sum=%f\n", sum);
            printf("Avg=%f", avg);
```

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            getch();
22
     Write a program to calculate average and total of 5 students for 3 subjects (use nested for loops)
            #include<stdio.h>
            #include<conio.h>
            void main()
            {
            int i,j;
            float n,sum,avg;
            clrscr();
            printf("Enter 5 students result:\n");
            for(i=1;i<=5;i++)
            sum=0;
            printf("Enter 3 subjects marks of %d student:\n",i);
            for(j=1;j<=3;j++)
            scanf("%f",&n);
            sum=sum+n;
            }
            avg=sum/3;
            printf("Total Marks=%f\n",sum);
            printf("Avg=%f\n",avg);
            getch();
23
     Read five persons height and weight and count the number of person having height greater than 170
     and weight less than 50,
            #include<stdio.h>
            #include<conio.h>
            void main()
            int i,count=0;
            float height, weight;
            clrscr();
            printf("Enter 5 person height and weight:\n");
            for(i=1;i<=5;i++)
```

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            scanf("%f %f",&height,&weight);
            if(height>=170 && weight<=50)
            count=count+1;
            printf("Ans=%d\n",count);
            getch();
            }
     Write a program to check whether the given number is prime or not.
24
            #include<stdio.h>
            #include<conio.h>
            void main()
            int n,i;
            clrscr();
            printf("Enter the Number\n");
            scanf("%d",&n);
            for(i=2;i<n;i++)
                   if(n\%i==0)
                   {
                           printf("The number is not a Prime Number");
                           break;
                   }
            if(n==i)
                   printf("The number is a Prime Number");
            getch();
            }
25
     Write a program to evaluate the series 1^2+2^2+3^2+....+n^2
            #include<stdio.h>
            #include<conio.h>
            #include<math.h>
            void main()
            int n,i,sum=0;
            clrscr();
```

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             printf("Enter the Number\n");
             scanf("%d",&n);
             for(i=1;i<=n;i++)
                    sum = sum + pow(i,2);
             printf("Ans of series= %d", sum);
             getch();
            }
     Write a C program to find 1+1/2+1/3+1/4+....+1/n.
26
             #include<stdio.h>
             #include<conio.h>
             void main()
             float n,i,sum=0;
             clrscr();
             printf("Enter the Number\n");
             scanf("%f",&n);
             for(i=1;i<=n;i++)
                    sum = sum + (float)(1/i);
             printf("Ans of series= %f", sum);
             getch();
             }
27
     Write a C program to find 1+1/2!+1/3!+1/4!+....+1/n!.
             #include<stdio.h>
             #include<conio.h>
             void main()
             float n,i,j,sum=0,f;
             clrscr();
             printf("Enter the Number\n");
             scanf("%f",&n);
             for(i=1;i<=n;i++)
            f=1;
             for(j=1; j<=i; j++)
                    f=f*j;
             sum = sum + (float)(1/f);
```

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            printf("Ans of series= %f", sum);
            getch();
            }
28
     Write a program to evaluate the series sum=1-x+x^2/2!-x^3/3!+x^4/4!...-x^9/9!
     #include <stdio.h>
     void main()
            float x,sum,t,d;
            int i,n;
            printf("Input the Value of x :");
            scanf("%f",&x);
            printf("Input the number of terms : ");
            scanf("%d",&n);
            sum =1; t = 1;
            for (i=1;i<n;i++)
             d = (2*i)*(2*i-1);
             t = -t*x*x/d;
             sum = sum + t;
            printf("\nthe sum = \% f\nNumber of terms = \% d\nvalue of x = \% f\n", sum,n,x);
     Write a program to print following patterns:
29
     1.
     ****
            #include<stdio.h>
            #include<conio.h>
            void main()
            float n,i,j,sum=0,f;
            clrscr();
            printf("Enter the Number\n");
            scanf("%f",&n);
            for(i=1;i<=n;i++)
            f=1;
```

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            for(j=1; j<=i; j++)
                    f=f*j;
            sum = sum + (float)(1/f);
            printf("Ans of series= %f", sum);
            getch();
     Write a program to print following patterns :
29
     1.
     1
     12
     123
     1234
     12345
            #include<conio.h>
            #include<stdio.h>
            void main()
            {
                    int i,j,n;
                    clrscr();
                    printf("Enter the value of n:\n");
                    scanf("%d",&n);
                    for(i=1;i<=n;i++)
                    {
                            for(j=1;j<=i;j++)
                                   printf("%d ", j);
                            printf("\n");
                    }
            getch();
            }
     2.
     12345
     1234
     123
     12
     1
```

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             #include<conio.h>
             #include<stdio.h>
             void main()
             {
                    int i,j,n;
                    clrscr();
                    printf("Enter the value of n:\n");
                    scanf("%d",&n);
                    for(i=n;i>=1;i--)
                    {
                            for(j=1;j<=i;j++)
                                    printf("%d ",j);
                            printf("\n");
                    }
            getch();
             }
31
     Write a program to print following patterns:
     AAAAA
     AAAA
     AAA
     AA
     A
             #include<conio.h>
             #include<stdio.h>
             void main()
             {
                    int i,j,n;
                    clrscr();
                    printf("Enter the value of n:\n");
                    scanf("%d",&n);
                    for(i=0;i<n;i++)
                            for(j=n;j>i;j--)
                                    printf("%c ",'A'+i);
```

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                           printf("\n");
            getch();
            }
     Write a C program to read and store the roll no and marks of 20 students using array.
32
            #include<stdio.h>
            #include<conio.h>
            void main()
            int roll[20],marks[20],i;
            clrscr();
            printf("Enter 20 students Roll no and Marks\n");
            for(i=0;i<20;i++)
                   scanf("%d %d", &roll[i], &marks[i]);
            printf("-----\n");
            printf("Roll No \t Marks\n");
            printf("-----\n");
            for(i=0;i<20;i++)
                   printf("%d \t\t %d\n", roll[i], marks[i]);
            getch();
            }
33
    Write a program to find out which number is even or odd from list of 10 numbers using array
            #include<stdio.h>
            #include<conio.h>
            void main()
            int i,a[10];
            clrscr();
            printf("Enter the array of 10 elements:\n");
            for(i=0;i<10;i++)
            scanf("%d", &a[i]);
            for(i=0;i<10;i++)
            if(a[i]\%2==0)
                   printf("%d is Even number \n", a[i]);
            else
                   printf("%d is Odd number \n", a[i]);
            getch();
            }
```

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34
     Write a program to find maximum element from 1-Dimensional array.
            #include<stdio.h>
            #include<conio.h>
            void main()
            int i,a[10],max;
            clrscr();
            printf("Enter the array of 10 elements:\n");
            for(i=0;i<10;i++)
            scanf("%d", &a[i]);
            max=a[0];
            for(i=0;i<10;i++)
            if(a[i]>max)
             max=a[i];
            printf("Max=%d", max);
            getch();
            }
35
     Write a C program to calculate the average, geometric and harmonic mean of n elements in an array.
            #include<stdio.h>
            #include<conio.h>
            #include<math.h>
            void main()
            float i,a[5],g,avg,h,hh=0,sum=0,mul=1,p;
            clrscr();
            printf("Enter the array of 5 elements:\n");
            for(i=0;i<5;i++)
            scanf("%f", &a[i]);
            // Average
            for(i=0;i<5;i++)
            sum=sum+a[i];
            avg=sum/5;
            printf("Average=%f\n",avg);
            //Geometric mean
            for(i=0;i<5;i++)
            mul=mul*a[i];
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             p=1.0/5;
             g=pow(mul,p);
             printf("Multiplication= %f \n Geometric mean=%f \n", mul, g);
             //Harmonic mean
             for(i=0;i<5;i++)
             hh = hh + 1.0/a[i];
             h=5/hh;
             printf("Harmonic mean= %f",h);
             getch();
             }
     Write a program to sort given array in ascending order (Use Insertion sort, Bubble sort, Selection
36
     sort, Mergesort, Quicksort, Heapsort).
             #include<stdio.h>
             #include<conio.h>
             void main()
             int i,j,a[5],temp;
             clrscr();
             printf("Enter the array of 5 elements:\n");
             for(i=0;i<5;i++)
             scanf("%d", &a[i]);
             for(i=0;i<4;i++)
            {
                    for(j=0;j<4;j++)
                            if(a[j]>a[j+1])
                                    temp=a[j];
                                    a[j]=a[j+1];
                                    a[j+1]=temp;
                            }
             printf("After sorting\n");
             for(i=0;i<5;i++)
            printf("%d \t ",a[i]);
             getch();
```

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37
     Write a program to find a character from given string.
             #include<stdio.h>
             #include<conio.h>
             void main()
             char s1[15];
             int i;
             char ch='a';
             clrscr();
             printf("Enter a string:\n");
             gets(s1);
             for(i=0;s1[i]!='\0';i++)
             if(s1[i]!=ch)
                    continue;
             else
                     printf("The character %c is at position: %d", ch,i+1);
                    break;
                    }
             if(s1[i]=='\0')
             printf("Character not found");
             getch();
38
     Write a program to replace a character in given string.
             #include<stdio.h>
             #include<conio.h>
             void main()
             char s1[15],ch,r_ch;
             int i;
             clrscr();
             printf("Enter a string:\n");
             gets(s1);
             printf("Enter a character to be replaced and replacement character:\n");
             scanf("%c %c",&ch,&r ch);
             for(i=0;s1[i]!='\0';i++)
             {
```

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             if(s1[i]==ch)
                     s1[i]=r_ch;
             printf("Modified string after replacement is : %s\n", s1);
             getch();
             }
39
     Write a program to delete a character in given string.
             #include<stdio.h>
             #include<conio.h>
             void main()
             char s1[15],s2[15],ch;
             int i,j;
             clrscr();
             printf("Enter a string:\n");
             gets(s1);
             printf("Enter a character to delete:\n");
             scanf("%c",&ch);
             j=0;
             for(i=0;s1[i]!='\0';i++)
             if(s1[i]!=ch)
                     {
                     s2[j]=s1[i];
                     j++;
                     }
             s2[j]='\0';
             printf("Modified string is : %s\n", s2);
             getch();
             }
40
     Write a program to reverse string.
             #include<stdio.h>
             #include<conio.h>
             void main()
             char s1[15];
```

```
Sr.
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             clrscr();
             printf("Enter a string:\n");
             gets(s1);
             printf("Reverse string is : %s\n", strrev(s1));
             getch();
             }
41
     Write a program to convert string into upper case
             #include<stdio.h>
             #include<conio.h>
             void main()
             char s1[15];
             clrscr();
             printf("Enter a string:\n");
             gets(s1);
             printf("The string in uppercase is: %s\n", strupr(s1));
             getch();
             }
42
     Write a program that defines a function to add first n numbers.
             #include<stdio.h>
             #include<conio.h>
             int add(int a[],int n);
             void main()
             {
             int i, a[5],y;
             clrscr();
             printf("Enter Array: \n");
             for(i=0;i<5;i++)
                     scanf("%d", &a[i]);
             y=add(a,5);
             printf("Sum=%d", y);
             getch();
             int add(int a[],int n)
             int i,sum=0;
             for(i=0;i<n;i++)
```

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                    sum=sum+ a[i];
             return(sum);
             }
43
     Write a function in the program to return 1 if number is prime otherwise return 0
             #include<stdio.h>
             #include<conio.h>
             int prime(int n);
             void main()
             int n,y;
             clrscr();
             printf("Enter the number:\n");
             scanf("%d",&n);
             y=prime(n);
             if(y==1)
                    printf("The number is a Prime Number");
             else
                    printf("The number is not a Prime Number");
             getch();
             }
             int prime(int n)
             int i;
             for(i=2;i<n;i++)
                    if(n\%i==0)
                            return(0);
                            break;
                    }
             if(n==i)
                    return(1);
             }
44
     Write a function Exchange to interchange the values of two variables, say x and y. illustrate the use
     of this function in a calling function.
             #include<stdio.h>
             #include<conio.h>
```

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             void exchange(int x,int y);
             void main()
             {
             int x,y;
             clrscr();
             printf("Enter the numbers:\n");
             scanf("%d %d",&x,&y);
             exchange(x,y);
             getch();
             void exchange(int x,int y)
             int temp;
             temp=x;
             x=y;
             y=temp;
             printf("After Exchange");
             printf("\nx= %d y = %d",x,y);
             }
45
     Write a program to find factorial of a number using recursion.
             #include<stdio.h>
             #include<conio.h>
             int factorial(int n);
             void main()
             int n,y;
             clrscr();
             printf("Enter the number:\n");
             scanf("%d",&n);
             y=factorial(n);
             printf("Factorial=%d",y);
             getch();
             int factorial(int n)
             int fact;
             if(n==1)
                    return(1);
```

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             else
                     fact = n * factorial(n-1);
             return(fact);
             }
48
     Write a function that will scan a character string passed as an argument and convert all lowercase
     character into their uppercase equivalents
             #include<stdio.h>
             #include<conio.h>
             void upper(char[]);
             int main()
             char str[20];
             clrscr();
             printf("Enter string: ");
             gets(str);
             upper(str);
             getch();
             return 0;
             void upper(char str[20])
             int i;
             printf("%s in upper case is ",str);
             for(i=0;str[i];i++)
             if(str[i]>96 && str[i]<123)
             str[i]-=32;
             printf("%s",str);
50
     Define a structure type struct personal that would contain person name, date of joining and salary
     using this structure to read this information of 5 people and print the same on screen.
             #include<stdio.h>
             #include<conio.h>
             struct personal
             char name[10];
```

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           int day;
           int month;
           int year;
           long int salary;
           void main()
           struct personal p1;
           clrscr();
           printf("Enter the name,date &salary\n");
           scanf("%s %d %d %d %ld",p1.name,&p1.day,&p1.month,&p1.year,&p1.salary);
           printf("Name:%s\tDate:%d/%d/%d\tSalary:%ld",p1.name,p1.day,p1.month,p1.year,p1.salary);
           getch();
           }
    Define structure data type called time struct containing three member's integer hour, integer minute
    and integer second. Develop a program that would assign values to the individual number and display
    the time in the following format: 16: 40:51
     #include <stdio.h>
    struct time_struct
     int hour;
     int minute;
     int second;
     }t;
    int main(void)
     printf("\n Enter Hour : ");
     scanf("%d",&t.hour);
     printf("\n Enter Minute: ");
     scanf("%d",&t.minute);
     printf("\n Enter Second : ");
     scanf("%d",&t.second);
     printf("\n Time %d:%d:%d",t.hour%24,t.minute%60,t.second%60);
     return 0;
52
    Define a structure called cricket that will describe the following information:
    Player name
    Team name
```

Practical Title Batting average Using cricket, declare an array player with 50 elements and write a C program to read the information about all the 50 players and print team wise list containing names of players with their batting average. #include<stdio.h> #include<conio.h> #include<string.h> struct cricket char nm[20],team[20]; int avg; **}**; #define total 5 int main() struct cricket player[total],temp; int i,j; clrscr(); for(i=0;i<total;i++) printf("For player %d\n",i+1); printf("Enter the name of player: "); fflush(stdin); gets(player[i].nm); printf("Enter the team : "); fflush(stdin); gets(player[i].team); printf("Enter the batting average : "); fflush(stdin): scanf("%d",&player[i].avg); printf("\nTeam Name Average\n"); printf(" $\n"$); for(i=0;i<total;i++) printf("%-10s %-10s %7d\n",player[i].team,player[i].nm,player[i].avg); getch(); return 0; 53 Design a structure student_record to contain name, branch and total marks obtained. Develop a program to read data for 10 students in a class and print them. #include<stdio.h> #include<conio.h> struct student record

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            char name[20];
            char branch[20];
            int total_marks;
            void main()
            int i;
            struct student record c1[10];
            printf("Enter the name, branch and total marks of 10 players\n");
            for(i=0;i<10;i++)
            scanf("%s %s %d",c1[i].name,c1[i].branch,&c1[i].total marks);
            printf("Name:%s\nBranch:%s\nTotal_marks:%d\n",c1[i].name,c1[i].branch,c1[i].total_marks);
            getch();
            }
54
     Write a program to print address of variable using pointer.
            #include<stdio.h>
            #include<conio.h>
            void main()
            char a;
            int x;
            float p,q;
            clrscr();
            a='A';
            x=125;
            p=10.25; q=18.76;
            printf("%c is stored at addr %u\n",a,&a);
            printf("%d is stored at addr %u\n",x,&x);
            printf("%f is stored at addr %u\n",p,&p);
            printf("%f is stored at addr %u\n",q,&q);
            getch();
            }
55
     Write a C program to swap the two values using pointers.
            #include<stdio.h>
```

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             #include<conio.h>
             void main()
             {
              int x, y, *p1, *p2, temp;
              clrscr();
              printf("Enter the value of x and y\n");
              scanf("%d%d", &x, &y);
              printf("Before Swapping\nx = %d\ny = %d\n'', x, y);
              p1 = &x;
              p2 = &y;
              temp = *p2;
               p2 = p1;
               *p1 = temp;
              printf("After Swapping\nx = %d\ny = %d\n'', x, y);
              getch();
             }
56
     Write a C program to print the address of character and the character of string using pointer.
     #include <stdio.h>
     int main()
        char str[100];
        char *ptr;
        printf("Enter a string: ");
        gets(str);
       //assign address of str to ptr
        ptr=str;
        printf("Entered string is: ");
        while(*ptr!='\setminus0')
          printf("%c",*ptr++);
       return 0;
57
     Write a program to access elements using pointer.
     #include <stdio.h>
     int main()
```

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      int data[5], i;
      printf("Enter elements: ");
       for(i = 0; i < 5; ++i)
        scanf("%d", data + i);
      printf("You entered: \n");
      for(i = 0; i < 5; ++i)
        printf("%d\n", *(data + i));
      return 0;
     Write a program for sorting using pointer.
58
     #include <stdio.h>
     void main()
      int *a,i,j,tmp,n;
            printf("\n\n Pointer : Sort an array using pointer :\n");
            printf("-----\n");
      printf(" Input the number of elements to store in the array : ");
      scanf("%d",&n);
       printf(" Input %d number of elements in the array : \n",n);
      for(i=0;i< n;i++)
        {
             printf(" element - %d : ",i+1);
             scanf("%d",a+i);
       for(i=0;i< n;i++)
       for(j=i+1;j< n;j++)
         if( *(a+i) > *(a+j))
        tmp = *(a+i);
        *(a+i) = *(a+j);
        *(a+j) = tmp;
       printf("\n The elements in the array after sorting : \n");
       for(i=0;i< n;i++)
             printf(" element - \%d: \%d \n",i+1,*(a+i));
```

```
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     printf("\n");
59
     Write a program to write a string in file
            #include<stdio.h>
            #include<conio.h>
            void main()
              char sentence[100];
              FILE *fptr;
              clrscr();
              fptr = fopen("program.txt", "w");
              printf("Enter a sentence:\n");
              gets(sentence);
              fprintf(fptr,"%s", sentence);
              fclose(fptr);
              getch();
            }
60
     A file named data contains series of integer numbers. Write a c program to read all numbers from file
     and then write all odd numbers into file named "odd" and write all even numbers into file named
     "even". Display all the contents of these file on screen
```