

1) Write a C Program to accept a four digit number from user and count zero , odd and even digits of the entered number

```
#include<stdio.h>
#include<conio.h>
main()
{
    int n,rem,czero=0,ceven=0,codd=0;
    clrscr();
    printf("Enter a four digit number: ");
    scanf("%d",&n);
    while(n>0)
    {
        rem=n%10;
        if(rem==0)
            czero++;
        if(rem%2==0)
            ceven++;
        else
            codd++;
        n=n/10;
    }
    printf("czero=%d ,ceven=%d , codd=%d",czero,ceven,codd);
}
```

2) Write a menu driven program in 'C' that shows the working of a library. The menu option should be -

- Add book information.
- Display book information.
- Exit

```
/* Program to add and display book information */
```

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
```

```
void add_book();
void disp_book();
```

```
struct library
```

```

{
    char book_title[20];
    char author_name[20];
    int  accno;
    float price;

};

struct library book[2];
main()
{
    int choice;
    while(1)
    {

        printf("\n 1.add book information");
        printf("\n 2.display book information");
        printf("\n 3.exit");
        printf("\n enter your choice");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:add_book();
                break;
            case 2:disp_book();
                break;

            case 3:exit(0);
        }
    }
}

void add_book()
{
    int i;
    printf("\n enter the details of the book");
    for(i=0;i<2;i++)
    {
        printf("\n enter name,author,accession number,price ");
        scanf("%s%s",book[i].book_title,book[i].author_name);
        fflush(stdin);
    }
}

```

```

        scanf("%d",&book[i].accno);
        fflush(stdin);
        scanf("%f",&book[i].price);
    }

}

void disp_book()
{
    int i;
    printf("\n details of %d books in library \n",i);
    for(i=0;i<2;i++)
    {
        printf("\n name of the book:  %s",book[i].book_title);
        printf("\n author of the book: %s",book[i].author_name);
        printf("\n accession number of the book:%d",book[i].accno);
        printf("\n price of the book:%.2f",book[i].price);
        printf("\n");
    }
}

linkfloat()
{
    float a,*b;
    b=&a;
}

```

3) Write a 'C' Program to calculate factorial of given number by using recursion.

```

/* factorial of a number using recursion */
#include<stdio.h>
#include<conio.h>
long int fact(int);
main()
{
    int n;

```

```

clrscr();
printf("enter the number whose factorial is to be found: ");
scanf("%d", &n);
printf("\n factorial of %4d is %8ld\n", n, fact(n));
getch();
}
long int fact(int n)
{
    if(n==0)
        return(1);
    else
        return(n*fact(n-1));
}

```

4) Write a C program to calculate the sum of digits of a given number

```

/* Write a C program to print the sum of the digits of a given number */
#include<stdio.h>
#include<conio.h>
main()
{
    int n, sum=0, rem;
    clrscr();
    printf("Enter a number");
    scanf("%d", &n);
    while(n>0)
    {
        rem=n%10;
        sum=sum+rem;
        n=n/10;
    }
    printf("sum=%d", sum);
}

```

5) Write a program to search a given number in a list of numbers

```
#include<stdio.h>

void main()
{
    int a[5],i,sum=0,x,f=0;
    printf("Enter the numbers ");
    for(i=0;i<5;i++)
        scanf("%d",&a[i]);
    printf("Enter the number to be searched ");
    scanf("%d",&x);

    for(i=0;i<5;i++)
    {
        if(a[i]==x)
        {
            f=1;
            break;
        }
    }
    if(f==1)
        printf("%d is found",x);
    else
        printf("%d is not found",x);
}
```

6) Write a 'C' Program to copy the contents of one file into another file.

```
/* copy contents of one file to another file */
#include<stdio.h>
#include<conio.h>
main()
{
    FILE *fs,*ft,*fp;
    char ch,c;

    clrscr();
```

```

fs=fopen("pr1.c","r");
if(fs==NULL)
{
    puts("cannot open source file");
    exit(1);
}
ft=fopen("pr2.c","w");
if(ft==NULL)
{
    puts("cannot open target file");
    fclose(fs);
    exit(1);
}
while(1)
{
    ch=fgetc(fs);
    if(ch==EOF)
        break;
    else
        fputc(ch,ft);
}
fclose(fs);
fclose(ft);
fp=fopen("pr2.c","r");
while(!feof(fp))
{
    c=fgetc(fp);
    putchar(c);
}
fclose(fp);
}

```

7) Write a C program to add all elements of a matrix by using dynamic memory allocation.

```

/*Program to print sum of all elements of a mxn matrix using dynamic
memory allocation*/
#include<malloc.h>
#include<stdio.h>
#include<conio.h>

```

```

#include<stdlib.h>
main()
{
    int **a,i,j,r,c,sum=0;
    clrscr();
    printf("Enter the order of matrix:\n");
    scanf("%d%d",&r,&c);
    a=(int **)malloc(r*sizeof(int));
    for(i=0;i<r;i++)
        a[i]=(int *)malloc(c*sizeof(int));

    /*For inputting matrix*/
    printf("Enter the matrix\n");
    for(i=0;i<r;i++)
        for(j=0;j<c;j++)
            scanf("%d",&a[i][j]);

    /*For printing the matrix*/
    printf("The matrix you entered is:\n");
    for(i=0;i<r;i++)
    {
        printf("\n\n");
        for(j=0;j<c;j++)
            printf("%4d",a[i][j]);
    }
    for(i=0;i<r;i++)
        for(j=0;j<c;j++)
            sum=sum+a[i][j];
    printf("\nSum of elements=%d",sum);
    getch();
}

```

8) Write a C program to perform the following operations on string using user defined function
Calculate length of string. Copy one string into another.

```

/* program to calculate length of string without using library function */
#include<stdio.h>
#include<conio.h>
main()

```

```

{
    char s[25];
    int n=0;
    clrscr();
    printf("\n enter a string \n");
    gets(s);
    while(s[n]!='\0')
        n++;
    printf("given string is \n%s \n length = %d \n",s,n);
    getch();
}

/*Program to copy one string to another without
   using standard library function*/

#include<stdio.h>
#include<conio.h>
void main()
{
    int i;
    char s[20],t[20];
    clrscr();
    printf("Enter the source string:\n");
    gets(s);
    for(i=0;s[i]!='\0';i++)
        t[i]=s[i];
    t[i]='\0';
    printf("\nSource string s=%s",s);
    printf("\nTarget string t=%s",t);
    getch();
}

```

9)Write a C program to generate the following pattern for n lines:

```

1  2  3  4
5  6  7
8  9
10

```

```

#include<stdio.h>
#include<conio.h>
Void main()
{

```



```

Int i,j,k=1;
Clrscr();
For (i=1;i<=4;i++)
{
For ( j = 4 ; j >= i ; j --,k ++ )
{
Printf ("%d\t",k);
}
Printf ("\n");
}
}

```

10) Write a 'C' Program to calculate sum of elements of a mXn matrix.

/*Program to print sum of all elements of a mxn matrix using dynamic memory allocation*/

```

#include<malloc.h>
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
main()
{
    int **a,i,j,r,c,sum=0;
    clrscr();
    printf("Enter the order of matrix:\n");
    scanf("%d%d",&r,&c);
    a=(int **)malloc(r*sizeof(int));
    for(i=0;i<r;i++)
    a[i]=(int *)malloc(c*sizeof(int));

    /*For inputting matrix*/
    printf("Enter the matrix\n");
    for(i=0;i<r;i++)
        for(j=0;j<c;j++)
            scanf("%d",&a[i][j]);

    /*For printing the matrix*/
    printf("The matrix you entered is:\n");
    for(i=0;i<r;i++)
    {

```

```

        printf("\n\n");
        for(j=0;j<c;j++)
            printf("%4d",a[i][j]);
    }
    for(i=0;i<r;i++)
        for(j=0;j<c;j++)
            sum=sum+a[i][j];
    printf("\nSum of elements=%d",sum);
    getch();
}

```

11) Write a C program to accept three integers as command line arguments and find the minimum, maximum and average of the three numbers. Display error message if the number of arguments entered are invalid

```

/* accept 3 numbers as command line arguments and find max,min and avg */
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
main(int argc, char *argv[])
{
    int a,b,c;

    clrscr();
    a=atoi(argv[1]);
    b=atoi(argv[2]);
    c=atoi(argv[3]);
    if(a>b && a>c)
        printf("max=%d",a);
    else if(b>c)
        printf("max=%d",b);
    else
        printf("max=%d",c);
    if(a<b && a<c)
        printf("\t min=%d",a);
    else if(b<c)
        printf("\t min=%d",b);
    else
        printf("min=%d",c);
}

```

```

    printf("\t average=%f", (a+b+c)/3.0);
    getch();
}

```

12) Write a 'C' Program to accept 'n' numbers and store all prime numbers in an array and display this array.

```

#include<stdio.h>
#include<conio.h>
main()
{
    int n,num,i,c,b[25],k=0;
    clrscr();
    printf("enter how many numbers ");
    scanf("%d",&n);
    for(c=0;c<n;c++)
    {
        scanf("%d",&num);
        for(i=2;i<=num-1;i++)
            if(num%i==0)
            {
                break;
            }

        if(i==num)
        {
            b[k]=num;
            k++;
        }
    }
    for(i=0;i<k;i++)
    printf("%d\t",b[i]);

}

```

13) Write a C program to calculate the x to the power y without using standard function.

```

/* Write a C program to calculate x to the power y without using standard
function */

```

```

#include<stdio.h>
void main()
{
    int x,y;
    int p=1,count=1;
    printf("Enter the values of x and y ");
    scanf("%d%d",&x,&y);
    while(count<=y)
    {
        p*=x;
        count++;
    }
    printf("%d to power %d = %d",x,y,p);
}

```

14) Write a 'C' Program to store the records of student (stud_no, Stud_name, stud_addr, stud_Percentage) in a file using structure.

```

/* Write a 'C' Program to store the records of student (stud_no,
Stud_name, stud_addr, stud_Percentage) in a file using
structure */
/* Note: take structure members as per above question in the program
below */

```

```

#include<stdio.h>
#include<stdlib.h>
#include<conio.h>
struct stud
{
    int rollno;
    char name[40];
};
void main()
{
    FILE *fp;
    int i,n;

    struct stud s;

```

```

fp=fopen("student.dat", "wb");
if(fp==NULL)
{
    puts("cannot open file");
    exit(1);
}

printf("\nEnter no. of students\n:");
scanf("%d", &n);
for(i=1; i<=n; i++)
{
    printf("Enter rollno and name\n ");
    scanf("%d", &s.rollno);
    fflush(stdin);
    scanf("%s", s.name);
    fwrite(&s, sizeof(s), 1, fp);
}

fclose(fp);

fp=fopen("student.dat", "rb");
if(fp==NULL)
{
    puts("cannot open file");
    exit(1);
}
while(fread(&s, sizeof(s), 1, fp))
{
    printf("\n rollno =%d , name : %s ", s.rollno, s.name);
}

fclose(fp);
}

```

15) Write a 'C' Program to accept a string from user and display the alternate characters.

```
#include<stdio.h>
#include<conio.h>
#include<string.h>

main()
{
    char str[15];
    int i,j;
    clrscr();
    printf("enter a string ");
    gets(str);

    j=strlen(str);
    for(i=0;i<=j;i+=2)
        printf("%c",str[i]);
    getch();
}
```

16) Write a 'C' Program to sort elements of an array in ascending order using dynamic memory allocation .

```
/* Program to sort elements of an array in ascending order using dynamic
memory allocation */
#include<stdio.h>
#include<conio.h>
#include<malloc.h>
void main()
{
    int *a;
    int max,n,i,j,temp;
    clrscr();
    printf("\n Enter size of array");
    scanf("%d",&n);
    a=(int *)malloc(n * sizeof(int));
    printf("enter elements of array\n");
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);
}
```

```

        for(i=0;i<n-1;i++)
            for(j=i+1;j<n;j++)
                if(a[i]>a[j])
                {
                    temp=a[i];
                    a[i]=a[j];
                    a[j]=temp;
                }

printf("elements of array in ascending order\n");
for(i=0;i<n;i++)
    printf("%d\n",a[i]);

}

```

17) Write a 'C' Program to count the number of characters, number of words and number of lines from a text file and display the result.

```

/* count chars, words, lines in a file */
#include<stdio.h>
#include<conio.h>
main()
{
    FILE *fp;
    char ch;
    int nol=0,nob=0,noc=0;
    clrscr();
    fp=fopen("demo.txt","r");
    while(1)
    {
        ch=fgetc(fp);
        if(ch==EOF)
            break;
        noc++;
        if(ch==' ')
            nob++;
    }
}

```

```

        if (ch=='\n')
            nol++;

    }
    fclose(fp);
    printf("\n number of characters=%d",noc);
    printf("\n number of blanks=%d",nob);
    printf("\n number of lines=%d",nol);
}

```

18) Write a C program to check whether given number is Palindrome or not.

```

#include<stdio.h>
int main () {
    int n, ori, rem, reverse=0;
    printf("Enter numbers: ");
    scanf("%d", &n);

    ori = n;

    while (n!= 0) {
        rem = n % 10;
        reverse = reverse * 10 + rem;
        n /= 10;
    }
    printf("The reverse of %d is %d\n", ori, reverse);

    if (ori == reverse)
        printf("The given number is palindrome");
    else
        printf("The given number is not a palindrome");
}

```

19) Write a C program to check whether given number is perfect or not.

```

#include<stdio.h>
int main()
{
    int num, i, sum = 0;
    printf("Enter an integer: ");
    scanf("%d", &num);
    for (i = 1; i < num; i++) {

```



```

if (num % i == 0) {
    sum += i;
}
}
if (sum == num) {
    printf("%d is a perfect number\n", num);
} else {
    printf("%d is not a perfect number\n", num);
}
}

```

20) Write a C program to accept string from the user & replace all occurrences of character 'a' by '*' symbol.

```

#include<stdio.h>
#include<conio.h>
#include<string.h>
Void main ()
{
    Char str[10];
    Int i;
    Clrscr();
    Printf(" enter a string \n ");
    Gets(str);
    for (i=0; i <= strlen(str);i++)
    {
        If (str[i]=='a')
        {
            str[i]='*';
        }
    }
    Puts(str);
}

```

21) Write a C program to generate following pattern for n lines.

```

A
B B
C C C
D D D D
E E E E E

```

```

#include<stdio.h>

```

```

#include<conio.h>
Void main()
{
    Int i , j ;
    Char ch = 'A';
    Clrscr();
    For(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            Printf("%c\t",ch);
        }
        Printf("\n"); ch++;
    }
}

```

22) Write a 'C' Program to accept 'n' numbers from user, store these numbers into an array. Find out Maximum and Minimum number from an Array(using function).

```

/* Write a 'C' Program to accept 'n' numbers from user, store these
numbers into an array. Find out Maximum and Minimum number from an
Array(using function).*/

```

```

#include<stdio.h>
#include<conio.h>
void maxmin(int [],int);
void main()
{
    int a[5];
    int n,i,j,temp;
    clrscr();
    printf("\n Enter size of array");
    scanf("%d",&n);

    printf("enter elements of array\n");
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);
    maxmin(a,n);
}
void maxmin(int a[],int y)
{

```

```

    int max,min,i;
    max=a[0];
    min=a[0];
    for(i=0;i<y;i++)
    {
        if(max < a[i])
            max =a[i];
    }
    for(i=0;i<y;i++)
    {
        if(min>a[i])
            min=a[i];
    }

    printf("\n max = %d,min=%d",max,min);

    getch();
}

```

23) Write a C program to convert a given string into uppercase & vice versa

```

#include<stdio.h>
#include<conio.h>
main()
{
    int i;
    char s[20];
    printf("\n enter a string");
    gets(s);
    for(i=0;s[i]!='\0';i++)

        if(s[i]>=65&& s[i]<91)
            s[i]=s[i]+32;
        else
            s[i]=s[i]-32;
    // s[i]='\0';
    puts(s);

    getch();
}

```

```
}
```

24) Write a C program to display multiplication table of a given number.

```
#include <stdio.h>
```

```
int main() {
    int num;

    // Asking user to enter a number
    printf("Enter a number: ");
    scanf("%d", &num);

    // Displaying the multiplication table
    printf("Multiplication Table of %d:\n", num);
    for (int i = 1; i <= 10; i++) {
        printf("%d x %d = %d\n", num, i, num * i);
    }

    return 0;
}
```

25) Write a C program to calculate the sum of following series using function.

Sum=1+1/x+1/x²+1/x³+1/x⁴+.....

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
Main()
```

```
{
```

```
Char c ;
```

```
Clrscr();
```

```
C=getche();
```

```
Printf("\t ASCII value is %d",c);
```

```
Printf("\n Previous character = %c", c-1);
```

```
Printf("\n next character = %c", c+1);
```

```
}
```

26) Write a C program to sort an array of n integers using selection sort.

```
/* Selection sort */
```

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void main()
```

```
{
```

```

int a[10];
int n,i,j,temp;
clrscr();
printf("\n Enter size of array");
scanf("%d",&n);

printf("enter elements of array\n");
for(i=0;i<n;i++)
    scanf("%d",&a[i]);
for(i=0;i<n-1;i++)
for(j=i+1;j<n;j++)
    if(a[i]>a[j])
    {
temp=a[i];
a[i]=a[j];
a[j]=temp;
    }
printf("elements of array in ascending order\n");
for(i=0;i<n;i++)
    printf("%d\n",a[i]);
}

```

27) Write a C program to calculate sum of digits till it reduces to a single digit using recursion

```

/* sum of the digits of a number till it reduces to a single digit */
#include<stdio.h>
#include<conio.h>
int recur(long);
main()
{
    long int num;
    int sum;
    clrscr();
    printf("enter the number");
    scanf("%ld",&num);
    sum=recur(num);
    printf("\n %d",sum);
    getch();
}

```

```

int recur(long int num1)
{
    int sum1=0,digit;
    while (num1>0)
    {
        digit=num1%10;
        sum1=sum1+digit;
        num1=num1/10;
    }
    if (sum1>=10)
        sum1=recur(sum1);
    return sum1;
}

```

.

28) Write a C program to accept n different numbers and display sum of all +ve & -ve numbers.

/* Program to accept n different numbers and display sum of all +ve & -ve numbers */

```

#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i,x,s=0,s1=0;
    printf("enter how many numbers\n");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        printf("enter the numbers\n");
        scanf("%d",&x);
        if(x>0)
            s=s+x;
        else
            s1=s1+(x);
    }
    printf("sum of positive numbers=%d \t sum of negative\n");
    printf("numbers=%d",s,s1);
}

```

29) Write a menu driven program in C to create a structure employee having fields empid , empname ,salary. Accept the details of n Employees from user and perform the following operations using function - Search by Empid - Display Names of Employee having salary is greater than 10000.

```
#include<stdio.h>
#include<conio.h>
struct emp
{
int empid;
char empname[20];
float salary; };
void main()
{
struct emp e[10];
int i,n,flag=0,eno,ff=0;
float f,*fp;
fp=&f;
clrscr();
printf("Enter the number of employees\n");
scanf("%d",&n);
printf("Enter %d employee details \n",n);
for(i=0;i<n;i++)
{

scanf("%d",&e[i].empid);
fflush(stdin);
scanf("%s",e[i].empname);
fflush(stdin);
scanf("%f",&e[i].salary);
}
printf("Enter empid to be searched \n");
scanf("%d",&eno);
printf("%d employee details \n",n);
for(i=0;i<n;i++)
printf("%5d%10s%10.2f\n",e[i].empid,e[i].empname,e[i].salary);
printf("empid to be searched \n");
printf("%d\n",eno);
for(i=0;i<n;i++)
if(e[i].empid==eno)
{
flag=1;
break;
}
```

```

if(flag==1)
printf("found\n");
1
else
printf("not found
else
printf("not found\n");
printf("Employees having salary > 10000 are \n");
for(i=0;i<n;i++);
if(e[i].salary>10000);
{
ff=1;
printf("%10s%10.2f\n",e[i].empname,e[i].salary);
}
if(ff==0);
printf("No employees having salary > 10000");
}

```

30) Write a C program to display transpose of matrix using user defined function.

/* Program to sort elements of an array in ascending order using dynamic memory allocation */

```

#include<stdio.h>
#include<conio.h>
#include<malloc.h>
void main()
{
    int *a;
    int max,n,i,j,temp;
    clrscr();
    printf("\n Enter size of array");
    scanf("%d",&n);
    a=(int *)malloc(n * sizeof(int));
    printf("enter elements of array\n");
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);

    for(i=0;i<n-1;i++)
        for(j=i+1;j<n;j++)
            if(a[i]>a[j])

```



```

    {
        temp=a[i];
        a[i]=a[j];
        a[j]=temp;
    }

    printf("elements of array in ascending order\n");
    for(i=0;i<n;i++)
        printf("%d\n",a[i]);

}

```

31) Write a C program to calculate sum of all even numbers in an array.

```

#include<stdio.h>
void main()
{
    int a[5],i,sum=0;
    printf("Enter the numbers ");
    for(i=0;i<5;i++)
        scanf("%d",&a[i]);
    for(i=0;i<5;i++)
    {
        if(a[i]%2==0) sum+=a[i];
    }
    printf("sum=%d",sum);
}

```

32) Write a C program to accept string from user and display alternate character of string in upper case .(eg: I/P hello O/P hElLo).

```

#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<ctype.h>
main()
{
    char str[15],str1[15];
    int i,j,m;

```

```

clrscr();
printf("enter a string ");
gets(str);
m=strlen(str);
for(i=0;i<=m;i++)
{
    if(i%2==0)

        str[i]=toupper(str[i]);

}
puts(str);

getch();
}

```

33) Write a C program to accept n employee information(eno, enme, salary) and display the employee information having maximum salary. Use array of structure.

```

#include<stdio.h>
#include<conio.h>
struct emp
{
    int empid;
    char empname[20];
    float salary;
};
void main()
{
    struct emp e[10],temp;
    int i,n,j;
    float f,*fp;
    fp=&f;
    clrscr();
    printf("Enter the number of employees\n");
    scanf("%d",&n);
    printf("Enter %d employee details \n",n);
    for(i=0;i<n;i++)
    {

scanf("%d%s%f",&e[i].empid,e[i].empname,&e[i].salary);

```

```

}
printf("%d employee details \n",n);
for(i=0;i<n;i++)
printf("%5d%10s%10.2f
\n",e[i].empid,e[i].empname,e[i].salary);
for(i=0;i<n-1;i++)
for(j=i+1;j<n;j++)
if(e[i].salary<e[j].salary)
{
temp=e[i];
e[i]=e[j];
e[j]=temp;
}
printf("Employee having maximum salary\n");
printf("%5d%10s%10.2f\n",e[0].empid,e[0].empname,e[0].salary);

```

34) Write a C program to copy one file to another using command line arguments.

```

/* program to copy one file to another using command line arguments */
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
void main( int argc, char *argv[])
{
    FILE *fs,*ft;
    char ch;
    if(argc!=3)
    {
        puts("improper number of arguments");
        exit(0);
    }
    fs=fopen(argv[1],"r");
    if(fs==NULL)
    {
        puts("cannot open source file");
        exit(0);
    }
    ft=fopen(argv[2],"w");
    if(ft==NULL)
    {
        puts("cannot open target file");
        fclose(fs);
    }
}

```

```

        exit(0);
    }
    while(1)
    {
        ch=fgetc(fs);
        if(ch==EOF)
            break;
        else
            fputc(ch,ft);
    }
    fclose(fs);
    fclose(ft);
}

```

35) Write a C program to convert temperature from Celsius to Fahrenheit.

```
#include <stdio.h>
```

```
#include <conio.h>
```

```
int main() {
```

```
    float celsius, fahrenheit;
```

```
    clrscr();
```

```
    printf("Enter temperature in Celsius: ");
```

```
    scanf("%f", &celsius);
```

```
    fahrenheit = (celsius * 9 / 5) + 32;
```

```
    printf("Temperature in Fahrenheit: %.2f\n", fahrenheit);
```

```
    getch();
```

```
    return 0;
```

```
}
```

36) Write a 'C' program to accept customer details such as: Account_no, Name, Balance in account, Assume Maximum 10 customers in the bank. Write a function to print the account no and name of each customer with balance below Rs.100. (using structure)

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void setdata();
```

```

void display();
void lowbal();
/* struture of customer */
struct customer
{
    int accno;
    char name[20];
    float balance;
};
struct customer cust[2];
void main()
{
    int i,ano,choice;
    float amt;
    float f,*fp;
    fp=&f;
    clrscr();
    setdata();
    display();
    lowbal();
}
void setdata()
{
    int i;
    for(i=0;i<2;i++)
    {
        printf("\n enter accno of customer\n");
        scanf("%d",&cust[i].accno);

        printf("\n enter name of customer\n");
        scanf("%s",cust[i].name);

        printf("\n enter balance of customer\n");
        scanf("%f",&cust[i].balance);
    }
}
void display()
{
    int i;
    for(i=0;i<2;i++)

```

```

    {
        printf("\n account number of customer=%d",cust[i].accno);
        printf("\n name of customer=%s",cust[i].name);
        printf("\n balance amount of customer=%f",cust[i].balance);
    }
}

void lowbal()
{
    int i,j=0;
    clrscr();
    printf("\n name and account number of customers whose balance is less
than 100");
    for(i=0;i<2;i++)
    {
        if(cust[i].balance<100)
        {
            j=1;
            printf("\n account number of customer=%d",cust[i].accno);
            printf("\n name of customer=%s",cust[i].name);
        }
    }
    if(j==0)
        printf("\n every customer has minimum balance" );
}

```

37) Write a C program to print the Fibonacci series upto n terms.

```

/* program to print Fibonacci series upto given terms */
#include<stdio.h>
#include<conio.h>
main()
{
    int t1=1,t2=1,t3,i,n;
    clrscr();

    printf("enter the number of terms ");
    scanf("%d",&n);
    printf("%d\t%d\t",t1,t2);

```

```

    for (i=1; i<=n-2; i++)
    {

        t3=t1+t2;
        printf("%d\t", t3);
        t1=t2;
        t2=t3;
    }

    getch();
}

```

38) Write a C program to accept character & display its ASCII value and its next & previous character.

```

#include<stdio.h>
#include<conio.h>

```

```

Main()
{
    Char c ;
    Clrscr();
    C=getche();
    Print("\t ASCII value is %d",c);
    Print("\n Previous character = %c", c-1);
    Print("\n next character = %c", c+1);
}

```

39) Write a C program to calculate the area of following (Use switch case statement) i. Circle ii. Rectangle iii Triangle

```

/* menu driven program to calculate area */
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
main()
{
    int ch;
    float s,l,b,r,base,ht;
    float acircle,arect,atriangle;
    clrscr();
    do

```

```

{
printf("\n Main Menu \n");
printf("1. Area of circle\n");
printf("2. Area of rectangle\n");
printf("3. Area of triangle\n");
printf("4. Exit\n");
printf("Enter your choice: ");
scanf("%d", &ch);
    switch(ch)
    {
        case 1:printf("\n Enter radius ");
            scanf("%f", &r);
            acircle=3.14*r*r;
            printf("\n Area of circle = %f",acircle);
            break;
        case 2:printf("\n Enter length and breadth of rectangle ");
            scanf("%f%f", &l, &b);
            arect=l*b;
            printf("\n Area of rectangle = %f",arect);
            break;
        case 3:printf("\n Enter base and height of triangle ");
            scanf("%f%f", &base, &ht);
            atriangle=0.5*base*ht;
            printf("\n Area of triangle = %f",atriangle);
            break;

        case 4:exit(0);
    }
}while(ch>=1 && ch<=4);
}

```

40) Write a 'C' Program to accept a string from user, delete all vowels from that string and display the result.

```

/* Write a C program to delete all vowels from a string not more than 15
characters */
#include<stdio.h>
#include<conio.h>
main()
{
    char s[15],str1[15];

```



```
int i=0,j=0;
clrscr();
printf("\n enter a string not more than 15 characters \n");
gets(s);
while(s[i]!='\0')
{
    if(s[i]=='a' || s[i]=='e' || s[i]=='i' || s[i]=='o' || s[i]=='u')
        i++;
    else
        if(s[i]=='A' || s[i]=='E' || s[i]=='I' || s[i]=='O' || s[i]=='U')
            i++;
        else
        {
            str1[j]=s[i];
            i++;
            j++;
        }
}

str1[j]='\0';
printf("\n string after removing all vowels \n");
puts(str1);
getch();
}
```