

CODERPRADIP'S COMPUTER
SCIENCE SOLUTION

**C PROGRAMMING
SOLUTIONS FOR
CLASS XII**

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1. For any integer input through the keyboard, write a C program to find out whether it is odd or even. [HSEB 2062,2066,2068]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n;
    printf("\nEnter any number: ");
    scanf("%d",&n);
    if(n%2==0)
        printf("%d is Even",n);
    else
        printf("%d is Odd",n);
    getch();
}
```

2. Write a C program to input cost price (CP) and selling price (SP) and determines whether there is gain or loss. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    float cp,sp;
    clrscr();
    printf("\nEnter Cost Price and Selling Price: ");
    scanf("%f%f",&cp,&sp);
    if(sp>cp)
        printf("Rs. %.2f is Profit",sp-cp);
    else
        printf("Rs. %.2f is Loss",cp-sp);
    getch();
}
```

3. Write a C program that reads three numbers and displays the largest among them. [HSEB 2065]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a,b,c;
    clrscr();
```

```
printf("\nEnter any three numbers: ");
scanf("%d%d%d",&a,&b,&c);
if(a>b && a>c)
    printf("%d is Greater",a);
else if(b>a && b>c)
    printf("%d is Greater",b);
else
    printf("%d is Greater",c);
getch();
}
```

4. Write a C program that checks whether the number entered by the user is exactly divisible by 5 but not by 11. [HSEB 2065]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n;
    clrscr();
    printf("\nEnter any number: ");
    scanf("%d",&n);
    if(n%5==0 && n%11!=0)
        printf("%d is exactly Divisible by 5 but not by 11",n);
    else
        printf("condition dissatisfied");
    getch();
}
```

5. Write a C program to find the commission amount on the basis of sales amount as per following conditions:

Sales amount (Rs)	Commission
0-1000	5%
1001-2000	10%
>2000	12%

[HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    float s,ca;
    clrscr();
    printf("\nEnter sales amount: ");
    scanf("%f",&s);
    if(s>=0 && s<=1000)
        ca=0.05*s;
```

```
    else if(s>1000 && s<=2000)
        ca=0.1*c;
    else
        ca=0.12*c;
    printf("Your Commission is Rs. %.2f",ca);
    getch();
}
```

6. Write a program to display name of the day on the basis of entered number 1 to 7. For example, 1 for Sunday. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n;

    printf("\nEnter number between 1 to 7 ");
    scanf("%d",&n);
    switch(n)
    {
        case 1:
            printf("\nSUNDAY");
            break;
        case 2:
            printf("\nMONDAY");
            break;
        case 3:
            printf("\nTUESDAY");
            break;
        case 4:
            printf("\nWEDNESDAY");
            break;
        case 5:
            printf("\nTHURSDAY");
            break;
        case 6:
            printf("\nFRIDAY");
            break;
        case 7:
            printf("\nSATURDAY");
            break;
        default:
            printf("\n Invalid Choice");
    }
}
```

```
getch();
}
```

7. Write a C program to display the sum of 'n' terms of even numbers. [HSEB 2063]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,n,s=0,a=2;
    clrscr();
    printf("\nEnter how many numbers? ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        s+=a;
        a=a+2;
    }
    printf("\n Sum of %d terms of even numbers is %d",n,s);
    getch();
}
```

8. Write a C program to input a number and display its multiplication table. [HSEB 2958, 2061]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i;
    clrscr();
    printf("\n Enter number:");
    scanf("%d",&n);
    for(i=1;i<=10;i++)
    printf("\n%d X %d = %d",n,i,n*i);

    getch();
}
```

9. Write a C program to read a positive number integer less than 20 and display its multiplication table. [HSEB 2062]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i;
    clrscr();
```

```
printf("\n Enter positive number less than 20:");
scanf("%d",&n);
if(n>0 && n<20)
{
for(i=1;i<=10;i++)
printf("\n%d X %d = %d",n,i,n*i);
}
else
printf("\n Invalid number");

getch();
}
```

10. Write a C program to print 10 terms of any series using FOR loop. [HSEB 2064]

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,a=5;
clrscr();
printf("\n Enter how many numbers?");
scanf("%d",&n);
for(i=0;i<n;i++)
{
printf("%d\t",a);
a=a+5;
}

getch();
}
```

11. Write a C program to print 10 terms of the following series using FOR loop, 1, 5, 9, 13 [HSEB 2063]

```
#include<stdio.h>
#include<conio.h>
void main()
{
int i,a=1;
clrscr();
for(i=0;i<10;i++)
{
printf("%d\t",a);
a=a+4;
}
}
```

```
getch();
}
```

12. Write a C program to read a four digit number and display it in reverse order. [HSEB 2055]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int c=0,n,r,s=0;
    clrscr();
    printf("\n Enter any 4 digit number: ");
    scanf("%d",&n);
    while(n!=0)
    {
        r=n%10;
        s=s*10+r;
        n=n/10;
        c=c+1;
    }
    if(c<=4)
        printf("\n Reversed number is %d",s);
    else
        printf("\n It is not a 4 digit number");
    getch();
}
```

13. Write a C program to find the factorial of a given positive number. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,f=1,i;
    clrscr();
    printf("\n Enter positive number: ");
    scanf("%d",&n);
    if(n<0)
        printf("\n You have entered negative number");
    else if(n==0)
        printf("\n Factorial of %d is 1",n);
    else
    {
        for(i=1;i<=n;i++)
            f=f*i;
    }
}
```

```
printf("\n Factoria of %d is %d",n,f);
}

getch();
}
```

14. Write a C program to print 10 positive integers and their factorials. [HSEB 2062]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,f=1,i;
    clrscr();
    printf("\n Enter positive number: ");
    scanf("%d",&n);
    if(n<0)
        printf("\n You have entered negative number");
    else if(n==0)
        printf("\n Factorial of %d is 1",n);
    else
    {
        for(i=1;i<=n;i++)
        {
            printf("%d\t",i);
            f=f*i;
        }
        printf("\n Factoria of %d is %d",n,f);
    }

    getch();
}
```

15. Write a program to input an integer number and check whether it is prime or not. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,c=0,i;
    clrscr();
    printf("\nEnter any integer number: ");
    scanf("%d",&n);
```

```
for(i=1;i<=n;i++)
{
    if(n%i==0)
        c=c+1;
}
if(c==2)
    printf("%d is prime number",n);
else
    printf("%d is not prime number",n);

    getch();
}
```

16. Write a C program to input 'n' numbers and find out the largest and smallest number. [HSEB 2062]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i,num[100],g,s;
    clrscr();
    printf("\nEnter how many numbers?");
    scanf("%d",&n);
    printf("\nEnter %d numbers",n);
    for(i=0;i<n;i++)
        scanf("%d",&num[i]);
    g=num[0];
    s=num[0];
    for(i=1;i<n;i++)
    {
        if (num[i]>g)
            g=num[i];
        if(num[i]<s)
            s=num[i];
    }
    printf("\nThe greatest number is %d",g);
    printf("\nThe smallest number is %d",s);
    getch();
}
```

17. Write a program to ask any n numbers from the user. Sort them in ascending order and display. [HSEB 2065, 2067]

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

```
int n,i,j,num[10],temp;
clrscr();
printf("Enter how many numbers?");
scanf("%d",&n);
printf("\nEnter %d numbers",n);
for(i=0;i<n;i++)
scanf("%d",&num[i]);

for(i=0;i<n;i++)
{
for(j=i+1;j<n;j++)
{
if(num[i]>num[j])
{
temp=num[i];
num[i]=num[j];
num[j]=temp;
}
}
}
printf("\n The sorted numbers in ascending order are\n");
for(i=0;i<n;i++)
printf("%d\t",num[i]);
getch();
}
```

18. Write a program to store ten different constant variables in an array and print out the greatest number. [HSEB 2064]

```
#include<stdio.h>
#include<conio.h>
void main()
{
int i,num[10],g;
clrscr();
printf("\nEnter 10 numbers");
for(i=0;i<10;i++)
scanf("%d",&num[i]);
g=num[0];
for(i=1;i<10;i++)
{
if (num[i]>g)
g=num[i];
}
printf("\nThe greatest number is %d",g);
}
```

```
    getch();
}
```

19. Write a program to sort integer variables in descending order. [HSEB 2063]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i,j,num[10],temp;
    clrscr();
    printf("Enter how many numbers?");
    scanf("%d",&n);
    printf("\nEnter %d numbers",n);
    for(i=0;i<n;i++)
        scanf("%d",&num[i]);

    for(i=0;i<n;i++)
    {
        for(j=i+1;j<n;j++)
        {
            if(num[i]<num[j])
            {
                temp=num[i];
                num[i]=num[j];
                num[j]=temp;
            }
        }
    }
    printf("\n The sorted numbers in ascending order are\n");
    for(i=0;i<n;i++)
        printf("%d\t",num[i]);
    getch();
}
```

20. Write a C program to read salaries of 200 employees and count the number of employees getting salary between 5000 to 10000. [HSEB 2062]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,c=0;
    float s[200];
    clrscr();
    printf("\nEnter salaries for 200 employees");
    for(i=0;i<200;i++)
        scanf("%f",&s[i]);
```

```
for(i=0;i<200;i++)
{
    if (s[i]>5000 && s[i]<10000)
        c=c+1;
}
printf("Total number of employees getting salary between 5000 and 10000 are %d",c);

getch();
}
```

21. Write a program using C language to read the age of 100 persons and count the number of persons in the age group between 50 and 60. Use FOR and CONTINUE statement. [HSEB 2061]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,c=0;
    float a[100];
    clrscr();
    printf("\nEnter age of 100 persons");
    for(i=0;i<100;i++)
        scanf("%f",&a[i]);
    for(i=0;i<100;i++)
    {
        if (a[i]>50 && a[i]<60)
            c=c+1;
        else
            continue;
    }
    printf("Total number of persons aged between 50 and 60 are %d",c);

    getch();
}
```

22. Write a C program to read age of 40 students and count the number of students of the age between 15 and 22. [HSEB 2063]

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,c=0;
    float a[40];
    clrscr();
    printf("\nEnter age of 40 students");
    for(i=0;i<40;i++)
        scanf("%f",&a[i]);
```

```

for(i=0;i<40;i++)
{
    if (a[i]>15 && a[i]<22)
        c=c+1;
}
printf("Total number of students aged between 15 and 21 are %d",c);

    getch();
}

```

23. Write a program in C to store mark obtained by 'n' students and count the number of students who obtained mark greater than 70. Also count the number of students who are failed. (<35) [HSEB 2066]

```

#include<stdio.h>
#include<conio.h>
void main()
{
    int n,i,c=0,cf=0;
    float m[100];
    clrscr();
    printf("\nEnter how many students?");
    scanf("%d",&n);
    printf("\nEnter marks for %d students: ",n);
    for(i=0;i<n;i++)
    scanf("%f",&m[i]);
    for(i=0;i<n;i++)
    if(m[i]>70)
    c=c+1;
    else if(m[i]<35)
    cf=cf+1;
    printf("\n Total no. of students scoring more than 70 are %d ",c);
    printf("\nTotal no. of students who are fail are %d ",cf);
    getch();
}

```

24. Write a program to read elements of the two matrices of order 3 x 3 and perform the matrix addition. [HSEB 2065]

```

#include<stdio.h>
#include<conio.h>
void main()
{
    int a[3][3], b[3][3],s[3][3],i,j;
    clrscr();
    printf("\nEnter elements for matrix A\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)

```

```

    {
        printf("\nEnter the number [%d] [%d] ",i,j);
        scanf("%d",&a[i][j]);
    }
}
printf("\n Enter the elements for matrix B\n");
for(i=0;i<3;i++)
{
    for(j=0;j<3;j++)
    {
        printf("\nEnter the number [%d] [%d] ",i,j);
        scanf("%d",&b[i][j]);
    }
}
printf("\n The sum of two matrix is\n");
for(i=0;i<3;i++)
{
    for(j=0;j<3;j++)
    {
        s[i][j]=a[i][j]+b[i][j];
    }
}
for(i=0;i<3;i++)
{
    for(j=0;j<3;j++)
    {
        printf("%d\t",s[i][j]);
    }
    printf("\n");
}
getch();
}

```

25. Write a program to count the number of vowels and consonants in a given text. [HSEB 2064, 2066]

```

#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
    char str[20];
    int nv=0,nc=0,i;
    printf("\nEnter any string");
    gets(str);
    strupr(str);
    for(i=0;str[i]!='\0';i++)
    {

```

```
if(str[i]=='A' || str[i]=='E' || str[i]=='I' || str[i]=='O' || str[i]=='U')
nv++;
else if(str[i]>='A' && str[i]<='Z')
nc++;
}
printf("\n No. of Vowels = %d ",nv);
printf("\n No. of Consonants = %d ",nc);
getch();
}
```

26. Write a program to read a line of text and convert it into uppercase. [HSEB 2068]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char string[100];
printf("\nEnter any line of text in lowercase\n");
gets(string);
strupr(string);
printf("\nEnterd text converted into uppercase\n");
puts(string);
getch();
}
```

OR

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char string[100];
int i;
printf("\nEnter any line of text in lowercase\n");
gets(string);
for(i=0;string[i]!='\0';i++)
{
if(string[i]>='a' && string[i]<='z')
string[i]=string[i]-32;
}
printf("\nEnterd text converted into uppercase\n");
puts(string);
getch();
}
```

27. Write a program to input n names and sort them in alphabetical order. [HSEB 2062, 2068]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
    char name[50][20],temp[20];
    int i,n,j;
    printf("\nEnter how many names: ");
    scanf("%d",&n);
    printf("Enter %d names\n",n);
    for(i=0;i<n;i++)
    scanf("%s",name[i]);
    for(i=0;i<n;i++)
    {
        for(j=i+1;j<n;j++)
        {
            if(strcmp(name[i],name[j])>0)
            {
                strcpy(temp,name[i]);
                strcpy(name[i],name[j]);
                strcpy(name[j],temp);
            }
        }
    }
    printf("\nThe sorted names are\n");
    for(i=0;i<n;i++)
    printf("\n%s",name[i]);
    getch();
}
```

28. Write a C Program to enter name of students and age of ten different students in array and arrange them in descending order according to the age and print them. [HSEB 2057]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
struct student
{
    char name [25];
    int age;
}std[10];

void main()
```

```
{
char temp[25];
int i,j,tm;

printf("Enter 10 names and age of students\n");
for(i=0;i<10;i++)
{
scanf("%s",std[i].name);
scanf("%d",&std[i].age);
}
for(i=0;i<10;i++)
{
for(j=i+1;j<10;j++)
{
if(std[i].age<std[j].age)
{
tm=std[i].age;
std[i].age=std[j].age;
std[j].age=tm;
strcpy(temp,std[i].name);
strcpy(std[i].name,std[j].name);
strcpy(std[j].name,temp);
}
}
}
printf("\nThe sorted names and age in descending order according to age are\n");
for(i=0;i<10;i++)
printf("\n%s\t%d",std[i].name,std[i].age);
getch();
}
```

29. Write a program to store name and mark of 20 students. Sort the data according to mark in descending order and display them. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
struct student
{
char name [25];
int mark;
}std[10];

void main()
{
```

```
char temp[25];
int i,j,tm;

printf("Enter names and marks for 20 students\n");
for(i=0;i<20;i++)
{
scanf("%s",std[i].name);
scanf("%d",&std[i].mark);
}
for(i=0;i<20;i++)
{
for(j=i+1;j<20;j++)
{
if(std[i].mark<std[j].mark)
{
tm=std[i].mark;
std[i].mark=std[j].mark;
std[j].mark=tm;
strcpy(temp,std[i].name);
strcpy(std[i].name,std[j].name);
strcpy(std[j].name,temp);
}
}
}
printf("\nThe sorted names and marks in descending order according to marks are\n");
for(i=0;i<20;i++)
printf("\n%s\t%d",std[i].name,std[i].mark);
getch();
}
```

30. Write a C program to store Kathmandu valley's 7 days maximum and minimum temperature (in centigrade) and calculate average, maximum, minimum temperature using function and print 7 days temperature, minimum, maximum and average temperature using any high level programming language. [HSEB 2060]

```
#include<stdio.h>
#include<conio.h>
float maxt(float []);
float min(float []);
```

```
float avg(float []);
float m[7],mi[7],a[7];
void main()
{

float maxtemp, mintemp, avgtemp;
int i;
clrscr();
maxtemp=maxt(m);
mintemp=min(mi);
avgtemp=avg(a);
printf("\n\tMax Temp\t Min Temp \t Average Temp\n");
for(i=1;i<=7;i++)
{
printf("\nDay %d\t%f\t%f\t%f\n",i,m[i],mi[i],a[i]);
}
printf("\n Maximum Temperature is %f",maxtemp);
printf("\n MInimum Temperature is %f",mintemp);
printf("\n Average Temperature is %f",avgtemp);
getch();
}
float maxt(float m[])
{
int i;
float tm;
for(i=1;i<=7;i++)
{
printf("\nEnter maximum temperature for day %d ", i);
scanf("%f",&m[i]);
}

tm=m[1];
for(i=2;i<=7;i++)
{
if (m[i]>tm)
tm=m[i];
}
return tm;
}
float min(float mi[])
{
int i;
float tmi;
for(i=1;i<=7;i++)
{
printf("\nEnter minimum temperature for day %d ", i);
```

```
scanf("%f",&mi[i]);
}
tmi=mi[1];
for(i=2;i<=7;i++)
{
if (mi[i]<tmi)
tmi=mi[i];
}
return tmi;
```

```
}
float avg(float a[])
{
int i;
float ta,s;
for(i=1;i<=7;i++)
{
a[i]=(m[i]+mi[i])/2;
s=s+a[i];
}
ta=s/7;
return ta;
}
```

31. Write a C program to input a message from keyboard and display the menu

- a. Print the message length in terms of characters.
- b. print the message in reverse order
- c. print the message in capital letters
- d. copy the message from one location of screen to another location. [HSEB 2060]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
char msg[100],msg1[100];
int i,ch,len,j;
clrscr();
printf("\n Enter a message:");
gets(msg);
printf("\n 1. Print the message length in terms of characters");
printf("\n 2. Print the message in reverse order");
printf("\n 3. Print the message in capital letters");
```

```
printf("\n 4. Copy the message from one location to another");
printf("\n Enter your choice (1-4)");
scanf("%d",&ch);
switch(ch)
{
case 1:

len=0;
while(msg[len]!='\0')

len++;
printf("\n The string %s has %d characters\n",msg,len);
break;
case 2:
len=strlen(msg);
j=0;
for(i=len-1;i>=0;i--)
msg1[j++]=msg[i];
msg[j]='\0';
strcpy(msg,msg1);
printf("\n The reversed string is %s",msg);
break;
case 3:
for(i=0;msg[i]!='\0';i++)
{
if(msg[i]>='a' && msg[i]<='z')
msg[i]=msg[i]-32;
}
printf("\n The message in uppercase %s",msg);
break;
case 4:
for(i=0;msg[i]!='\0';i++)
msg1[i]=msg[i];
msg1[i]='\0';
printf("The copied string is %s ",msg1);
break;
default:
printf("\n Invalid choice");
}
getch();
}
```

32. Write a program to find the sum of n integer numbers using function. {HSEB 2066}

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

```
int sum(int);
void main()
{
    int n,a;
    clrscr();
    printf("\nEnter how many numbers: ");
    scanf("%d",&n);
    a=sum(n);
    printf("\n Sum of %d numbers= %d",n,a);
    getch();
}
```

```
int sum(int n)
{
    int i,s=0;
    for(i=1;i<=n;i++)
        s=s+i;
    return s;
}
```

33. Write a program to calculate the factorial of a given number using function. [HSEB 2063]

```
#include<stdio.h>
#include<conio.h>
int fact(int);
void main()
{
    int n,a;
    clrscr();
    printf("\nEnter any number: ");
    scanf("%d",&n);
    a=fact(n);
    printf("\n factorial= %d",a);
    getch();
}
```

```
int fact(int n)
{
    int i,f=1;
    for(i=1;i<=n;i++)
        f=f*i;
    return f;
}
```

34. Write a program to calculate the factorial of a given number using recursive function. [HSEB 2064, 2068]

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

```
#include<conio.h>
int fact(int);
void main()
{
    int n,a;
    clrscr();
    printf("\nEnter any number: ");
    scanf("%d",&n);
    a=fact(n);
    printf("\n factorial= %d",a);
    getch();
}
```

```
int fact(int n)
{
    if(n<=1)
        return 1;
    else
        return(n*fact(n-1));
}
```

35. Write a program using user defined function to calculate y raise to power x.[HSEB 2067]

```
#include<stdio.h>
#include<conio.h>
int power(int,int);
void main()
{
    int y,x,p;
    printf("\nEnter values for y and x: ");
    scanf("%d%d",&y,&x);
    p=power(y,x);
    printf("\n y raise to power x= %d",p);
    getch();
}
int power(int y, int x)
{
    int pw=1,i;
    for(i=1;i<=x;i++)
        pw=pw*y;
    return pw;
}
```

36. Write a program that reads different names and addresses into the computer and rearrange them into alphabetical order using the structure variables. [HSEB 2061, 2064]

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
struct student
{
char name[30];
char add [30];
}std[100];
void main()
{
char tname[30],tadd[30];
int i,j,n;
printf("\n Enter how many students: ");
scanf("%d",&n);
printf("Enter names and addresses for %d srudents: ",n);
for(i=0;i<n;i++)
scanf("%s%s",std[i].name, std[i].add);
for(i=0;i<n;i++)
{
for(j=i+1;j<n;j++)
{
if (strcmp(std[i].name,std[j].name)>0)
{
strcpy(tname,std[i].name);
strcpy(std[i].name,std[j].name);
strcpy(std[j].name,tname);
strcpy(tadd,std[i].add);
strcpy(std[i].add,std[j].add);
strcpy(std[j].add,tadd);
}
}
}
printf("\n Sorted names in alphabetical order according to names are:\n");
for(i=0;i<n;i++)
printf("\n %s\t %s",std[i].name,std[i].add);
getch();
}
```

37. Write a program to show data writing and reading operation to/from a data file. [HSEB 2066]

```
#include<stdio.h>
#include<conio.h>
struct
{
int roll;
char name[25];
```

```
float mark;
}std;
void main()
{
int n,i;
FILE *fp;
fp=fopen("d:\\cprg\\student.txt","wb");
clrscr();
printf("\n Enter how many records: ");
scanf("%d",&n);
printf("enter student number name and marks for %d students",n);
for(i=0;i<n;i++)
{
scanf("%d%s%f",&std.roll,std.name,&std.mark);
fwrite(&std,sizeof(std),1,fp);
}
fclose(fp);
fp=fopen("d:\\cprg\\student.txt","r");
printf("\nRoll\tName\tMarks Obtained\n");
while(fread(&std,sizeof(std),1,fp))
printf("%d\t%s\t%f\n",std.roll,std.name,std.mark);
fclose(fp);
getch();
}
```

38. Write a program to enter name, roll-number and marks of 10 students and store them in a file.

[HSEB 2065]

```
# winclude<stdio.h>
```

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

```
struct
```

```
{
int roll;
char name[25];
float mark;
}std;
```

```
void main()
```

```
{
int i;
FILE *fp;
fp=fopen("d:\\cprg\\student.txt","wb");
clrscr();
printf("enter student roll number name and marks for 10 students");
for(i=0;i<10;i++)
{
scanf("%d%s%f",&std.roll,std.name,&std.mark);
fwrite(&std,sizeof(std),1,fp);
}
```

```
}  
fclose(fp);  
  
getch();  
}
```

39. Write a program to store std-no, name and mark of 'n' students in a data file. Display the records in appropriate format reading from the file. [HSEB 2066]

```
#include<stdio.h>  
#include<conio.h>  
struct  
{  
    int roll;  
    char name[25];  
    float mark;  
}std;  
void main()  
{  
    int n,i;  
    FILE *fp;  
    fp=fopen("d:\\cprg\\student.txt","w");  
    clrscr();  
    printf("\n Enter how many records: ");  
    scanf("%d",&n);  
    printf("enter student number name and marks for %d students",n);  
    for(i=0;i<n;i++)  
    {  
        scanf("%d%s%f",&std.roll,std.name,&std.mark);  
        fprintf(fp,"%d\t%s\t%f\n",std.roll,std.name,std.mark);  
    }  
    fclose(fp);  
    fp=fopen("d:\\cprg\\student.txt","r");  
    printf("\nRoll\tName\tMarks Obtained\n");  
    while(fscanf(fp,"%d%s%f",&std.roll,std.name,&std.mark)!=EOF)  
        printf("%d\t%s\t%f\n",std.roll,std.name,std.mark);  
    fclose(fp);  
    getch();  
}
```

40. Write a program using C language that reads successive records from the new data file and display each record on the screen in an appropriate format. [HSEB 2061, 2062]

```
#include<stdio.h>  
#include<conio.h>  
struct  
{
```

```
int roll;
char name[25];
float mark;
}std;
void main()
{
int n,i;
FILE *fp;
fp=fopen("d:\\cprg\\student.txt","wb");
clrscr();
printf("\n Enter how many records: ");
scanf("%d",&n);
printf("enter student number name and marks for %d students",n);
for(i=0;i<n;i++)
{
scanf("%d%s%f",&std.roll,std.name,&std.mark);
fwrite(&std,sizeof(std),1,fp);
}
fclose(fp);
fp=fopen("d:\\cprg\\student.txt","r");
printf("\nRoll\tName\tMarks Obtained\n");
while(fread(&std,sizeof(std),1,fp))
printf("%d\t%s\t%f\n",std.roll,std.name,std.mark);
fclose(fp);
getch();
}
```

41. Write a program to rename and delete a data file using rename and remove command. [HSEB 2064, 2067]

```
#include<stdio.h>
#include<conio.h>
void main()
{
char filename[20];
char oldfilename[20],newfilename[20];
printf("\n Enter the file name to be removed: ");
gets(filename);
if(remove(filename)==0)
printf("File %s is removed",filename);
else
printf("File %s cannot be removed",filename);
printf("\n Enter old file name: ");
gets(oldfilename);
printf("\n Enter new file name: ");
gets(newfilename);
if(rename(oldfilename,newfilename)==0)
```

```
printf("\n File %s is renamed to %s",oldfilename,newfilename);
else
printf("\n file %s cannot be renamed",oldfilename);

getch();
}
```

42. Write a program to open a new file and read roll-no, name, address and phone number of students until the user says “no”, after reading the data, write it to the file then display the content of the file. [HSEB 2068]

```
#include<stdio.h>
#include<conio.h>
struct
{
int roll;
char name[25];
char add[30];
long phone;
}std;
void main()
{
char ch='y';
FILE *fp;
fp=fopen("d:\\cprg\\student.txt","w");
clrscr();
while(ch=='y' || ch=='Y')
{
printf("\n Enter roll number: ");
scanf("%d",&std.roll);
printf("\n Enter name: ");
scanf("%s",std.name);
printf("\n Enter address: ");
scanf("%s",std.add);
printf("\n Enter phone number: ");
scanf("%ld",&std.phone);
fprintf(fp,"%d\t%s\t%s\t%ld\n",std.roll,std.name,std.add,std.phone);
printf("DO you want to continue (Y/N)? ");
ch=getche();
}
fclose(fp);
fp=fopen("d:\\cprg\\student.txt","r");
printf("\nRoll\tName\tAddress\tPhone\n");
while(fscanf(fp,"%d%s%s%ld",&std.roll,std.name,std.add,&std.phone)!=EOF)
printf("%d\t%s\t%s\t%ld\n",std.roll,std.name,std.add,std.phone);
```

```
fclose(fp);  
getch();  
}
```