

This are the source code of all the programs which are mentioned in the previous article: [45 C Language Programs List for Exam Preparation](http://www.param-world.blogspot.in). You need to compile this programs using compiler like TURBO C so that you can run the program.

//1. Program to find area and circumference of circle.

//http://www.param-world.blogspot.in

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

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

```
void main()
```

```
{
```

```
int r;
```

```
float pi=3.14,area,ci;
```

```
clrscr();
```

```
printf("enter radius of circle: ");
```

```
scanf("%d",&r);
```

```
area=pi*r*r;
```

```
printf("area of circle=%f",area);
```

```
ci=2*pi*r;
```

```
printf("circumference=%f",ci);
```

```
getch();
```

```
}
```

//2. Program to find the simple interest.

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

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

```
void main()
```

```
{
```

```
int p,r,n,si;
```

```
clrscr();
```

```
printf("Enter principle, Rate of interest & time to find simple interest: ");
```

```
scanf("%d%d%d",&p,&r,&n);
```

```
si=(p*r*n)/100;
```

```
printf("simple intrest= %d",si);
```

```
getch();
```

```
//http://www.param-world.blogspot.in
```

```
}
```

//3. Program to convert temperature from degree centigrade to Fahrenheit.

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

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

```

void main()
{
float c,f;
clrscr();
printf("Enter temp in centigrade: ");
scanf("%f",&c);
f=(1.8*c) 32;
printf("Temp in Fahrenheit=%f",f);
getch();
//http://www.param-world-blogspot.in
}

```

//4.Program to calculate sum of 5 subjects & find percentage.

```

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

void main()
{
int s1,s2,s3,s4,s5,sum,total=500;
float per;
clrscr();
printf("enter marks of 5 subjects: ");
scanf("%d%d%d%d%d",&s1,&s2,&s3,&s4,&s5);
sum=s1+s2+s3+s4+s5;
printf("sum=%d",sum);
per=(sum*100)/total;
printf("percentage=%f",per);
getch();
//http://www.param-world-blogspot.in
}

```

//5. Program to show swap of two no's without using third variable.

```

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

void main()
{
int a,b;
clrscr();
printf("enter value for a & b: ");
scanf("%d%d",&a,&b);
a=a+b;

```

```

b=a-b;
a=a-b;
printf("after swapping the value of a & b: %d %d",a,b);
getch();
//http://www.param-world-blogspot.in
}

```

//6. Program to reverse a given number.

```

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

void main()
{
int n,a,r=0;
clrscr();
printf("enter any no to get its reverse: ");
scanf("%d",&n);
while(n>=1)
{
a=n%10;
r=r*10+a;
n=n/10;
}
printf("reverse=%d",r);
getch();
//http://www.param-world-blogspot.in
}

```

//7. Program to find gross salary.

```

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

void main()
{
int gs,bs,da,ta;
clrscr();
printf("enter basic salary: ");
scanf("%d",&bs);
da=(10*bs)/100;
ta=(12*bs)/100;
gs=bs+da+ta;
printf("gross salary=%d",gs);
getch();
}

```

```
//http://www.param-world-blogspot.in  
}
```

//8. Program to print a table of any number.

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

```
void main()  
{  
int gs,bs,da,ta;  
clrscr();  
printf("enter basic salary: ");  
scanf("%d",&bs);  
da=(10*bs)/100;  
ta=(12*bs)/100;  
gs=bs+da+ta;  
printf("gross salary=%d",gs);  
getch();  
//http://www.param-world-blogspot.in  
}
```

//9. Program to find greatest in 3 numbers.

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

```
void main()  
{  
int a,b,c;  
clrscr();  
printf("enter value of a, b & c: ");  
scanf("%d%d%d",&a,&b,&c);  
if((a>b)&&(a>c))  
printf("a is greatest");  
if((b>c)&&(b>a))  
printf("b is greatest");  
if((c>a)&&(c>b))  
printf("c is greatest");  
getch();  
//http://www.param-world-blogspot.in  
}
```

//10. Program to show the use of conditional operator.

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

```
void main()
{
clrscr();
printf("enter value for a & b: ");
scanf("%d%d",&a,&b);
(a>b)?printf("a is greater"):printf("b is greater");
getch();
//http://www.param-world-blogspot.in
}
```

//11. Program to find that entered year is leap year or not.

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

```
void main()
{
int n;
clrscr();
printf("enter any year: ");
scanf("%d",&n);
if(n%4==0)
printf("year is a leap year");
else
printf("year is not a leap year");
getch();
//http://www.param-world-blogspot.in
}
```

//12. Program to find whether given no is even or odd.

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

```
void main()
{
int n;
clrscr();
printf("enter any no: ");
scanf("%d",&n);
if(n%2==0)
```

```
printf("no is even");
else
printf("no is odd");
getch();
//http://www.param-world-blogspot.in
}
```

//13. Program to shift input data by two bits to the left.

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

```
void main()
{
int x,y;
clrscr();
printf("Read the integer from keyboard :- ");
scanf("%d",&x);
x<<=3;
y=x;
printf("\nThe left shifted data is = %d ",y);
getch();
//http://www.param-world-blogspot.in
}
```

//14. Program to use switch statement. Display Monday to Sunday.

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

```
void main()
{
char ch;
clrscr();
printf("enter m for Monday\nt for Tuesday\nw for Wednesday\nh for
Thursday\nf for Friday\ns for Saturday\nu for Sunday);
scanf("%c",&ch);
switch(ch)
{
case 'm':
case 'M':
printf("monday");
break;
case 't':
case 'T':
```

```

printf("tuesday");
break;
case 'w':
case 'W':
printf("wednesday");
break;
case 'h':
case 'H':
printf("thusday");
break;
case 'f':
case 'F':
printf("friday");
break;
case 's':
case 'S':
printf("saturday");
break;
case 'u':
case 'U':
printf("sunday");
break;
default :
printf("wrong input");
break;
}
getch();
//http://www.param-world-blogspot.in
}

```

//15. Program to display arithmetic operator using switch case.

```

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

```

```

void main()
{
int a,b,n,s,m,su,d;
clrscr();
printf("enter two no's : ");
scanf("%d%d",&a,&b);
printf("enter 1 for sum\n2 for multiply\n3for subtraction\n4 for division: ");
scanf("%d",&n);
switch(n)
{
case 1:

```

```

s=a b;
printf("sum=%d",s);
break;
case 2:
m=a*b;
printf("multiply=%d",m);
break;
case 3:
su=a-b;
printf("subtraction=%d",su);
break;
case 4:
d=a/b;
printf("divission=%d",d);
break;
default:
printf("wrong input");
break;
}
getch();
//http://www.param-world-blogspot.in
}

```

//16. Program to display first 10 natural no & their sum.

```

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

void main()
{
int i,sum=0;
clrscr();
for(i=1;i<=10;i )
{
printf("%d no is= %d\n",i,I);
sum=sum i;
}
printf("sum =%d",sum);
getch();
//http://www.param-world-blogspot.in
}

```

//17. Program to print stars Sequence 1.

```

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

```



```

void main()
{
int i,j;
clrscr();
for(i=1;i<=5;i++ )
{
for(j=1;j<=i;j++)
printf("*");
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//18. Program to print stars Sequence 2.

```

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

```

```

void main()
{
int i,j,k;
clrscr();
for(i=1;i<=5;i++)
{
for(j=5;j>=i;j--)
printf(" ");
for(k=1;k<=i;k++)
printf("*");
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//19. Program to print star Sequence 3.

```

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

```

```

void main()
{
int i,j,k;

```

```

clrscr();
for(i=1;i<=3;i++)
{
for(j=3;j>=i;j--)
printf(" ");
{
for(k=1;k<=i*2-1;k++)
printf("*");
}
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//20. Program to print Fibonacci series up to 100.

```

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

```

```

void main()
{
int a=1,b=1,c=0,i;
clrscr();
printf("%d\t%d\t",a,b);
for(i=0;i<=10;i++)
{
c=a+b;
if(c<100)
{
printf("%d\t",c);
}
a=b;
b=c;
}
getch();
//http://www.param-world-blogspot.in
}

```

//21. Program to find factorial of a number.

```

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

```

```

void main()

```

```

{
int n,i,fact=1;
clrscr();
printf("Enter any no: ");
scanf("%d",&n);
for(i=n;i>=1;i--)
{
fact=fact*i;
}
printf("Factorial=%d",fact);
getch();
//http://www.param-world-blogspot.in
}

```

//22. Program to find whether given no is a prime no or not.

```

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

```

```

void main()
{
int i,n,r=0;
clrscr();
printf("Enter any no: ");
scanf("%d",&n);
for(i=2;i<=n-1;i++)
{
if(n%i==0)
r=1;
break;
}
if(r==0)
printf("prime no");
else
printf("Not prime");
getch();
//http://www.param-world-blogspot.in
}

```

//23. Program to display sum of series $1 + 1/2 + 1/3 + \dots + 1/n$.

```

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

```

```

void main()

```

```

{
int n,i,sum=0;
clrscr();
printf("Enter any no: ");
scanf("%d",&n);
printf("1");
for(i=2;i<=n-1;i++)
printf(" 1/%d ",i);
for(i=1;i<=n;i++)
sum=sum+i;
printf(" 1/%d",n);
printf("\nSum=1/%d",sum 1/n);
getch();
//http://www.param-world-blogspot.in
}

```

//24. Program to display series and find sum of 1+3+5+.....+n.

```

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

```

```

void main()
{
int n,i,sum=0;
clrscr();
printf("Enter any no: ");
scanf("%d",&n);
for(i=1;i<n;i=i 2)
{
printf("%d ",i);
sum=sum i;
}
printf("%d",n);
printf("\nsum=%d",sum n);
getch();
//http://www.param-world-blogspot.in
}

```

//25. Program to use bitwise AND operator between the two integers.

```

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

```

```

void main()
{

```

```

int a,b,c;
clrscr();
printf("Read the integers from keyboard:- ");
scanf("%d %d",&a,&b);
c=a&b;
printf("\nThe Answer after ANDing is: %d ",c);
getch();
//http://www.param-world-blogspot.in
}

```

//26. Program to add two number using pointer.

```

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

```

```

void main()
{
int *p1,*p2,sum;
clrscr();
printf("enter two no's: ");
scanf("%d%d",&*p1,&*p2);
sum=*p1 *p2;
printf("sum=%d",sum);
getch();
//http://www.param-world-blogspot.in
}

```

//27. Program to show sum of 10 elements of array & show the average.

```

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

```

```

void main()
{

```

```

int a[10],i,sum=0;
float av;
clrscr();
printf("enter elements of an array: ");

```

```

for(i=0;i<10;i++)
scanf("%d",&a[i]);
for(i=0;i<10;i )

```

```

sum=sum a[i];

printf("sum=%d",sum);
av=sum/10;
printf("%u201Caverage=%.2f%u201D,av);
getch();
//http://www.param-world-blogspot.in
}

```

//28. Program to find the maximum no in an array.

```

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

void main()
{
int a[5],max,i;
clrscr();
printf("enter element for the array: ");
for(i=0;i<5;i )
scanf("%d",&a[i]);
max=a[0];
for(i=1;i<5;i )
{
if(max<a[i])
max=a[i];
}
printf("maximum no= %d",max);
getch();
//http://www.param-world-blogspot.in
}

```

//29. Program to display matrix.

```

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

void main()
{
int a[3][2],b[3][2],i,j;
clrscr();
printf("enter value for a matrix: ");
for(i=0;i<3;i++)
{

```

```

for(j=0;j<2;j++)
scanf("%d",&a[i][j]);
}
printf("enter value for b matrix: ");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
scanf("%d",&b[i][j]);
}
printf("\na matrix is\n\n");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
{
printf(" %d ",a[i][j]);
}
printf("\n");
}

```

```

printf("\nb matrix is\n\n");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
{
printf(" %d ",b[i][j]);
}
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//30. Program to find sum of two matrices.

```

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

```

```

void main()
{
int a[3][2],b[3][2],c[3][2],i,j;
clrscr();
printf("Enter value for 1 matrix: ");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)

```

```

scanf("%d",&a[i][j]);
}
printf("Enter value for 2 matrix: ");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
scanf("%d",&b[i][j]);
}
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
c[i][j]=a[i][j] b[i][j];
}
printf("Sum of matrix is\n");
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
{
printf("%d\t",c[i][j]);
}
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//31. Program to find subtraction of two matrices.

```

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

```

```

void main()
{
int a[5],b[5],c[5],i;
clrscr();
printf("enter value for array a ");
for(i=0;i<5;i )
scanf("%d",&a[i]);
printf("enter value for array b ");
for(i=0;i<5;i )
scanf("%d",&b[i]);
for(i=0;i<5;i )
c[i]=a[i]-b[i];
printf("subtraction");
for(i=0;i<5;i )
printf(" %d ",c[i]);
}

```



```
getch();  
//http://www.param-world.blogspot.in  
}
```

//32. Program to multiplication , addition & subtraction of two matrices.

```
#include <stdio.h>  
#include <windows.h>  
#include <conio.h>  
void add();  
void sub();  
void mul();  
void getmatrix();  
int operation();  
void display();
```

```
int a[3][3],b[3][3],c[3][3];  
int i,j;  
int main()  
{  
    int ch;  
    getmatrix();  
do  
{  
    ch=operation();  
switch (ch)  
{  
case 1:  
    add();  
    printf("The matrix after addition is : \n");  
    display();  
    break;  
  
case 2:  
    sub();  
    printf("The matrix after subtraction is : \n");  
    display();  
    break;  
  
case 3:  
    mul();  
    printf("The matrix after multiplication is : \n");  
    display();  
    break;
```

```
case 4:
    display();
    break;

case 5:
    getmatrix();
    break;

case 6:
    break;

default:
    printf("\nYou entered invalid input!");
    break;
```

```
}
printf("\n");
getch();
}
while(ch!=6);
free (a);
return 0;
}
```

```
void add()
{
    for(i=0; i<=2; i++)
    {
        for(j=0; j<=2; j++)
        {
            c[i][j]=a[i][j]+b[i][j];
        }
    }
}
```

```
void sub()
{
    for(i=0; i<=2; i++)
    {
        for(j=0; j<=2; j++)
        {
            c[i][j]=a[i][j]-b[i][j];
        }
    }
}
```

```
void mul()
```

```

{
int m;
  for(i=0; i<=2; i++)
  {
    for(j=0; j<=2; j++)
    {
      m=0;
      for(int n=0; n<=2; n++)
      {
        m+=a[i][n]*b[n][j];
      }
      c[i][j]=m;
    }
  }
}

```

```

void getmatrix()
{
  printf("Input Values for First Matrix...\n\n");
  for(i=0;i<3;i++)
  {
    for(j=0;j<3;j++)
    {
      printf("Enter value of a[%d][%d]:",i,j);
      scanf("%d",&a[i][j]);
    }
  }
  printf("\n\n");
  printf("Input Values for Second Matrix...\n\n");
  for(i=0;i<3;i++)
  {
    for(j=0;j<3;j++)
    {
      printf("Enter value of b[%d][%d]:",i,j);
      scanf("%d",&b[i][j]);
    }
  }
}

```

```

void display()
{
  for(i=0; i<=2; i++)
  {
    for(j=0; j<=2; j++)
    {

```

```

        printf("%d\t",c[i][j]);
    }
    printf("\n");
}

}

int operation()
{
    int ch;
    system("cls");
    printf("\n*****\n");
    printf("Press 1 for matrix addition\nPress 2 for matrix substration\nPress 3
for matrix multiplication\nPress 4 to display\nPress 5 to enter new
matrices\nPress 6 for exit\n");
    printf("*****\n\n");
    scanf("%d",&ch);
    return ch;
}

```

//33. Program to find transpose of a matrix.

```

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

void main()
{
    int a[3][2],b[2][3],i,j;
    clrscr();
    printf("Enter value for matrix: ");
    for(i=0;i<3;i++)
    {
        for(j=0;j<2;j++)
            scanf("%d",&a[i][j]);
    }
    printf("Matrix:\n");
    for(i=0;i<3;i )
    {

```

```

for(j=0;j<2;j )
printf(" %d ",a[i][j]);
printf("\n");
}
for(i=0;i<3;i++)
{
for(j=0;j<2;j++)
b[j][i]=a[i][j];
}
printf("Transpose matrix:\n");
for(i=0;i<2;i++)
{
for(j=0;j<3;j++)
printf(" %d ",b[i][j]);
printf("\n");
}
getch();
//http://www.param-world-blogspot.in
}

```

//34. Program to find the maximum number in array using pointer.

```

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

void main()
{
int max,i,*a[5];
clrscr();
printf("enter element for the array: ");
for(i=0;i<5;i++)
scanf("%d",&*a[i]);
max=*a[0];
for(i=1;i<5;i++)
{
if(max<*a[i])
max=*a[i];
}
printf("maximum no= %d",max);
getch();
}

```

```
//http://www.param-world-blogspot.in  
}
```

//35. Program to reverse a number using pointer.

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

```
void main()  
{  
int *n,a,r=0;  
clrscr();  
printf("enter any no to get its reverse: ");  
scanf("%d",&*n);  
while(*n>=1)  
{  
a=*n%10;  
r=r*10 a;  
*n=*n/10;  
}  
printf("reverse=%d",r);  
getch();  
//http://www.param-world-blogspot.in  
}
```

//36. Program to show input and output of a string.

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

```
void main()  
{  
char a[50];  
clrscr();  
printf("enter any string: ");  
gets(a);  
puts(a);  
getch();  
//http://www.param-world-blogspot.in
```

```
}
```

//37. Program to find square of a number using functions.

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

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

```
void main()
```

```
{
```

```
int rev(int);
```

```
int r,a;
```

```
clrscr();
```

```
printf("enter any no: ");
```

```
scanf("%d",&a);
```

```
r=rev(a);
```

```
printf("square is : %d",r);
```

```
getch();
```

```
//http://www.param-world-blogspot.in
```

```
}
```

```
int rev(int x)
```

```
{
```

```
return(x*x);
```

```
}
```

//38. Program to swap two numbers using functions.

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

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

```
void main()
```

```
{
```

```
void swap(int,int);
```

```
int a,b,r;
```

```
clrscr();
```

```
printf("enter value for a&b: ");
```

```
scanf("%d%d",&a,&b);
```

```
swap(a,b);
```

```
getch();
```

```
//http://www.param-world-blogspot.in
```

```

}
void swap(int a,int b)
{
int temp;
temp=a;
a=b;
b=temp;
printf("after swapping the value for a & b is : %d %d",a,b);
}

```

//39. Program to find factorial of a number using functions.

```

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

```

```

void main()
{
int a,f;
int fact(int);
clrscr();
printf("enter a no: ");
scanf("%d",&a);
f=fact(a);
printf("factorial= %d",f);
getch();
//http://www.param-world-blogspot.in
}
int fact(int x)
{
int fac=1,i;
for(i=x;i>=1;i--)
fac=fac*i;
return(fac);
}

```

//40. Program to show table of a number using functions.

```

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

```



```

void main()
{
void table();
clrscr();

table();
getch();
//http://www.param-world-blogspot.in
}
void table()
{
int n,i,r;
printf("enter a no to know table: ");
scanf("%d",&n);
for(i=1;i<=10;i++)
{
r=n*i;
printf("%d*%d=%d\n",n,i,r);
}
}

```

//41. Program to show call by value.

```

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

void main()
{
int a,b,swap();
clrscr();
a=5;
b=10;
printf("value of a=%d & value of b=%d before swap ",a,b);
swap(a,b);
printf("\nvalue of a =%d & b=%d after swap",a,b);
getch();
//http://www.param-world-blogspot.in
}

```

```
int swap(int x,int y)
{
int temp;
temp=x;
x=y;
y=temp;
}
```

//42. Program to show call by reference.

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,*aa,*bb,swap();
clrscr();
a=5;
b=10;
aa=&a;
bb=&b;
printf("value of a= %d & value of b=%d before swap",a,b);
swap(aa,bb);
printf("\nvalue of a=%d & b=%d after swap",a,b);
getch();
//http://www.param-world-blogspot.in
}
int swap(int *x,int *y)
{
int temp;
temp=*x;
*x=*y;
*y=temp;
}
```

//43. Program to find largest of two numbers using functions.

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

```
void main()
```

```

{
void max();
clrscr();
max();
getch();
//http://www.param-world-blogspot.in
}
void max()
{
int a[5],max,n,i;
printf("How many no's you want to enter: ");
scanf("%d",&n);
printf("Enter element for the array: ");
for(i=0;i<n;i )
scanf("%d",&a[i]);
max=a[0];
for(i=1;i<5;i )
{
if(max<a[i])
max=a[i];
}
printf("maximum no= %d",max);
}

```

//44. Program to find factorial of a number using recursion.

```

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

void main()
{
int n;
clrscr();
printf("enter number: ");
scanf("%d",&n);
if(n<0)
printf("invalid number");
else
printf("%d!=%d",n,fact(n));
getch();
}

```

```
//http://www.param-world-blogspot.in
}  
int fact(int x)  
{  
if(x==0)  
return 1;  
else  
return(x*fact(x-1));  
}
```

//45. Program to find whether a string is palindrome or not.

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

```
void main()  
{  
char s1[20],s2[20];  
clrscr();  
printf("enter a string: ");  
scanf("%s",s1);  
strcpy(s2,s1);  
strrev(s2);  
if(strcmp(s1,s2)==0)  
printf("string is a palindrome");  
else  
printf("not a palindrome string");  
getch();  
//http://www.param-world-blogspot.in  
}
```