**1.**     **Write a  program  that  shows the summation of positive integer in between lower limit to upper limit.**

#include <stdio.h>

int main()

{

    int l,u,i,sum=0;

    printf("Enter Lower And Upper Limit=");

    scanf("%d %d",&l,&u);

    for(i=l;i<=u;i++)

    {

        sum=sum+i;

    }

    printf("summation is= %d",sum);

    return 0;

}

**2.**     **Write a program that shows the even summation of positive integer in between lower limit to upper limit.**

#include <stdio.h>

int main()

{

    int l,u,i,sum=0;

    printf("Enter Lower And upper Limit=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

        if(i%2==0)

        {

            sum=sum+i;

        }

    }

    printf("Even Summation Is=%d",sum);

    return 0;

}

**3. Write a program that show the odd summation of positive integer in between lower limit to upper limit if summation is greater than 9000.**

  #include <stdio.h>

int main()

{

    int i,l,u,sum=0;

    printf("Enter Lower And Upper Limit=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

       if(i%2!=0)

       {

           sum=sum+i;

       }

    }

    if(sum>9000)

    {

        printf("Odd Summation Greater Than 9000 is=%d",sum);

    }

    return 0;

}

**4. Write a program that show the summation of 1².2!+2².3!+3².4!+………..+n².(n+1)! .**

#include <stdio.h>

int main()

{

    int n,m,i,f=1,j,sum1,sum2=0,sum=0;

    printf("Enter Number Of Series=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        m=i+1;

        f=1;

        for(j=1;j<=m;j++)

        {

            f=f\*j;

        }

        sum1=i\*i\*f;

        sum2=sum2+sum1;

  }

    printf("Summation is=%d",(sum2));

}

**5. Write a program that shows prime/non-prime number.**

**Sample input: 6**

**Output : 6 is not a prime number**

#include <stdio.h>

int main()

{

    int i,n,prime=1;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=2;i<n;i++)

    {

        if(n%i==0)

        {

            prime=0;

        }

    }

    if(prime==1)

    {

        printf("%d is a prime number",n);

    }

    else

    {

        printf("%d is not a prime number",n);

    }

}

**6. Write a program to generate the all prime numbers of a given range.**

#include <stdio.h>

int main()

{

    int l,u,i,j,prime;

    printf("Enter Lower And Upper Limit=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

        prime=1;

        for(j=2;j<i;j++)

        {

            if(i%j==0)

            {

                prime=0;

                break;

            }

        }

            if(prime==1)

            {

                printf("%d\n",i);

            }

    }

    return 0;

}

**7. Write a program for nPr .**

#include <stdio.h>

int main()

{

    int n,r,i,m,f=1,g=1,j;

    printf("Enter n and r=");

    scanf("%d%d",&n,&r);

    m=n-r;

    for(i=1;i<=n;i++)

    {

        f=f\*i;

    }

    for(j=1;j<=m;j++)

    {

        g=g\*j;

    }

    printf("npr is=%d",f/g);

    return 0;

}

**8. Write a program for nCr .**

#include <stdio.h>

int main()

{

    int n,r,i,j,k,f=1,g=1,h=1,m;

    printf("Enter n and r=");

    scanf("%d%d",&n,&r);

    m=n-r;

    for(i=1;i<=n;i++)

    {

        f=f\*i;

    }

    for(j=1;j<=m;j++)

    {

        g=g\*j;

    }

    for(k=1;k<=r;k++)

    {

        h=h\*k;

    }

    printf("ncr is=%d",(f/(h\*g)));

    return 0;

}

**9. Write a program that shows the all factorial of positive integer in between lower limit to upper limit.**

#include <stdio.h>

int main()

{

    int l,u,i,j;

    printf("Enter Lower And Upper Limit=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

        int f=1;

        for(j=1;j<=i;j++)

        {

            f=f\*j;

        }

        printf("%d\n",f);

    }

  return 0;

**}**

**10. Write a program to generate the Fibonacci Series of a given range. (Fibonacci Series= 0 1**

**1 2 3 5 8 13 …..)**

**Sample input: 7**

**Output : 0 1 1 2 3 5 8 13 21**

#include <stdio.h>

int main()

{

    int n,a[100000],i;

    a[0]=0;

    a[1]=1;

    printf("Enter Range=");

    scanf("%d",&n);

    for(i=2;i<=n+2;i++)

    {

        a[i]=a[i-1]+a[i-2];

  }

    for(i=0;i<n+2;i++)

    {

        printf(" %d",a[i]);

    }

}

**11. Write a program that shows the multiplication of two matrixes.**

#include <stdio.h>

int main()

{

    int a[100][100],b[100][100],c[100][100],i,j,sum,c1,c2,r1,r2,k;

    printf("Enter Row Of Matrix A=");

    scanf("%d",&r1);

    printf("Enter Column Of Matrix A=");

    scanf("%d",&c1);

    printf("Enter Elements=\n");

    for(i=0;i<r1;i++)

    {

        for(j=0;j<c1;j++)

        {

            scanf("%d",&a[i][j]);

        }

    }

    printf("Enter Row Of Matrix B=");

    scanf("%d",&r2);

    printf("Enter Column Of Matrix B=");

    scanf("%d",&c2);

    printf("Enter Elements=\n");

    for(i=0;i<r2;i++)

    {

        for(j=0;j<c2;j++)

        {

            scanf("%d",&b[i][j]);

        }

    }

    printf("Matrix Multiplication Is=\n");

    for(i=0;i<r1;i++)

    {

        for(j=0;j<c2;j++)

        {

            sum=0;

            for(k=0;k<c1;k++)

            {

                sum=sum+a[i][k]\*b[k][j];

          }

             c[i][j]=sum;

             printf("%d\t",c[i][j]);

        }

        printf("\n");

}

    return 0;

}

**12. Write a program that shows the summation of two matrixes.**

#include <stdio.h>

int main()

{

    int a[100][100],b[100][100],c[100][100],i,j,r1,c1,r2,c2;

    printf("Enter Row Of Matrix A=");

    scanf("%d",&r1);

    printf("Enter Column Of Matrix A=");

    scanf("%d",&c1);

    printf("Enter Elements=\n");

    for(i=0;i<r1;i++)

    {

        for(j=0;j<c1;j++)

        {

            scanf("%d",&a[i][j]);

        }

    }

    printf("Enter Row Of Matrix B=");

    scanf("%d",&r2);

    printf("Enter Column Of Matrix B=");

    scanf("%d",&c2);

    printf("Enter Elements=\n");

    for(i=0;i<r2;i++)

    {

        for(j=0;j<c2;j++)

        {

            scanf("%d",&b[i][j]);

        }

    }

    printf("Sum Of Matrix is=\n");

    for(i=0;i<r1;i++)

    {

        for(j=0;j<c1;j++)

        {

            c[i][j]=a[i][j]+b[i][j];

        }

    }

    for(i=0;i<r1;i++)

    {

        for(j=0;j<c1;j++)

        {

            printf("%d\t",c[i][j]);

        }

        printf("\n");

    }

    return 0;

}

**13. Write a program that shows a transpose matrix.**

#include <stdio.h>

int main()

{

    int a[100][100],i,j,t[100][100],r,c;

    printf("Enter Row And Column Of Matrix=");

    scanf("%d%d",&r,&c);

    for(i=0;i<r;i++)

    {

        for(j=0;j<c;j++)

        {

            scanf("%d",&a[i][j]);

        }

    }

    for(i=0;i<r;i++)

    {

        for(j=0;j<c;j++)

        {

            t[j][i]=a[i][j];

        }

    }

    printf("Transpose Matrix Is=\n");

    for(i=0;i<c;i++)

    {

        for(j=0;j<r;j++)

        {

            printf("%d\t",t[i][j]);

        }

        printf("\n");

    }

}

**14. Write a program that the show the average marks of best 3 out of 4 CT.**

#include <stdio.h>

int main()

{

    int a[100],i,min,n,l,avg,sum=0;

    printf("Enter How Many CT Number=");

    scanf("%d",&n);

    printf("Enter Numbers=\n");

    for(i=0;i<n;i++)

    {

        scanf("%d",&a[i]);

    }

    min=a[0];

    for(i=0;i<n;i++)

    {

        if(a[i]<=min)

        {

            min=a[i];

        }

    }

    for(i=0;i<n;i++)

    {

        sum=sum+a[i];

    }

    n=n-1;

    sum=sum-min;

    avg=sum/n;

    printf("Average is=%d",avg);

}

**15. Write a program that show the output**

**1 2 3 4 5**

**1 2 3 4 5**

**1 2 3 4 5**

**1 2 3 4 5**

**1 2 3 4 5**

#include <stdio.h>

int main()

{

    int i,j,n;

    printf("Enter Number=\n");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

       for(j=1;j<=n;j++)

       {

           printf("%d",j);

       }

       printf("\n");

    }

}

**16. Write a program that show the output**

**1**

**1 2**

**1 2 3**

**1 2 3 4**

#include <stdio.h>

int main()

{

    int i,j,n;

    printf("Enter Number=\n");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        for(j=1;j<=i;j++)

        {

            printf("%d",j);

        }

        printf("\n");

    }

    return 0;

}

**17. Write a program that show the output**

**1**

**1 2**

**1 2 3**

**1 2 3 4**

**1 2 3 4 5**

#include <stdio.h>

int main()

{

    int i,j,n,sp;

    printf("Enter Number=\n");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        for(sp=1;sp<=n-i;sp++)

        {

            printf(" ");

        }

        for(j=1;j<=i;j++)

        {

            printf("%d",j);

        }

        printf("\n");

    }

    return 0;

}

**18. Write a program that show the output**

**1 2 3 4 5**

**6 7 8 9**

**11 12 13**

**16 17**

**21**

#include <stdio.h>

int main()

{

    int i,j,n,k=1,t=0;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=n;i>=1;i--)

    {

        for(j=1;j<=i;j++,k=k+1)

        {

            printf(" %d",k);

        }

        printf("\n");

        k=k+t;

        t++;

    }

}

**19. Write a program that show the output**

**1**

**2 3**

**4 5 6**

**7 8 9 10**

**11 12 13 14 15**

#include <stdio.h>

int main()

{

    int i,j,k=1,n;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        for(j=1;j<=i;j++,k++)

        {

            printf(" %d",k);

        }

        printf("\n");

    }

}

**20. Write a program that show the output**

**5**

**4 5**

**3 4 5**

**2 3 4 5**

**1 2 3 4 5**

#include <stdio.h>

int main()

{

    int i,j,n,sp;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        for(sp=n-i;sp>=1;sp--)

        {

            printf(" ");

        }

        for(j=n-i+1;j<=n;j++)

        {

            printf("%d",j);

        }

        printf("\n");

    }

}

**21. Write a program that show the output**

**5 4 3 2 1**

**4 3 2 1**

**3 2 1**

**2 1**

#include <stdio.h>

int main()

{

    int i,j,n;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=n;i>=1;i--)

    {

        for(j=i;j>=1;j--)

        {

            printf("%d",j);

        }

        printf("\n");

    }

    return 0;

}

**22. Write a program that show the output**

**1**

**1 2 3**

**1 2 3 4 5**

**1 2 3 4 5 6 7**

**1 2 3 4 5 6 7 8 9**

#include <stdio.h>

int main()

{

    int i,j,sp,n;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        for(sp=1;sp<=n-i;sp++)

        {

            printf(" ");

        }

        for(j=1;j<=2\*i-1;j++)

        {

            printf("%d",j);

        }

        printf("\n");

    }

}

**23. Write a program to read a string and compare it with predefined string “Rajshahi”.**

#include <stdio.h>

#include <string.h>

int main()

{

    char p[]="Rajshahi";

    char a[100];

    printf("Enter Your String=");

    gets(a);

    if(strcmp(p,a)==0)

    {

        printf("Entered String is Matched With Predefined String ");

    }

    else

    {

        printf("Entered String is Not Matched With Predefined String");

    }

    return 0;

}

**24. Write a program to read a string and print it in reverse order.**

**Sample input: Hello**

**Output : olleH**

#include <stdio.h>

#include <string.h>

int main()

{

    int a[100],b[100];

    printf("Enter Your String=");

    gets(a);

    strrev(a);

    printf("Reversed String Is=");

    puts(a);

    return 0;

}

**25. Write a program to compute n raised to the power x.**

**Sample input: n=2 x=3**

**Output : 2^3=8**

#include <stdio.h>

int main()

{

    int n,x,i,r=1;

    printf("Enter n and x=");

    scanf("%d%d",&n,&x);

    for(i=1;i<=x;i++)

    {

        r=n\*r;

    }

    printf("%d",r);

    return 0;

}

**26. Write a program that show perfect number or not.**

**Sample input: 6**

**Output : 6 is a perfect number**

#include <stdio.h>

int main()

{

    int n,i,sum=0;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<n;i++)

    {

        if(n%i==0)

        {

          sum=sum+i;

        }

    }

    if(sum==n)

    {

        printf("%d is Perfect Number",n);

    }

    else

    {

        printf("%d is Not Perfect Number",n);

    }

    return 0;

}

**27. Write a program that shows armstrong number or not.**

**Sample input: 371**

**Output : 371 is a armstrong number**

#include <stdio.h>

int main()

{

    int n,t,sum=0,r;

    printf("Enter Number=");

    scanf("%d",&n);

    t=n;

    while(t!=0)

    {

        r=t%10;

        sum=sum+r\*r\*r;

        t=t/10;

    }

    if(n==sum)

        printf("%d is an Armstrong Number\n",n);

    else

        printf("5d is Not an Armstrong\n",n);

}

**28. Write a program that convert float number into integer number.**

**Sample input : 7.8**

**Output : 8**

#include <stdio.h>

int main()

{

    float n;

    int m;

    printf("Enter Float Number=");

    scanf("%f",&n);

    m=n+0.5;

    printf("Integer Number is=%d",m);

}

**29. Write a program that convert uppercase letter to lowercase letter or vice versa.**

**Sample input : WeaReCse’13**

**Output : wEArEcSE’13**

#include <stdio.h>

#include <string.h>

int main()

{

    char a[100];

    int i;

    printf("Enter Your String=");

    gets(a);

    for(i=0;i<strlen(a);i++)

    {

        if(islower(a[i]))

        {

            printf("%c",toupper(a[i]));

        }

        else

        {

            printf("%c",tolower(a[i]));

        }

    }

}

**30. Write a program that show how many vowels in a word.**

**Sample input : RUET**

**Output : 2**

#include <stdio.h>

#include <string.h>

int main()

{

    char a[100];

    int i,v=0,l;

    printf("Enter String=");

    gets(a);

    l=strlen(a);

    for(i=1;i<=l;i++)

    {

       if(a[i]=='a'||a[i]=='A'||a[i]=='e'||a[i]=='E'||a[i]=='i'||a[i]=='I'||a[i]=='o'||a[i]=='O'||a[i]=='u'||a[i]=='U')

        {

            v=v+1;

        }

    }

    printf("%d",v);

}

**31. Write a program that show how many consonants in a word.**

**Sample input : RUET**

**Output : 2**

#include <stdio.h>

#include <string.h>

int main()

{

    char a[100];

    int i,v=0,c,l;

    printf("Enter String=");

    gets(a);

    l=strlen(a);

    for(i=1;i<=l;i++)

    {

       if(a[i]=='a'||a[i]=='A'||a[i]=='e'||a[i]=='E'||a[i]=='i'||a[i]=='I'||a[i]=='o'||a[i]=='O'||a[i]=='u'||a[i]=='U')

        {

            v=v+1;

        }

    }

    c=l-v;

    printf("%d",c);

}

**32. Write a program that for below:**

**Sample input : we live in Bangladesh**

**Output : we**

**live**

**in**

**Bangladesh**

#include <stdio.h>

#include <string.h>

int main()

{

    char a[100];

    int i,l;

    printf("Enter String=");

    gets(a);

    l=strlen(a);

    for(i=0;i<l;i++)

    {

      if(a[i]==' ')

      {

          printf("\n");

      }

      else

        printf("%c",a[i]);

    }

}

**33. Write a program that shows strong number or not.**

**Sample input: 145**

**Output : 145 is a strong number**

#include <stdio.h>

int main()

{

    int i,j,f,sum=0,r,n,t;

    printf("Enter Number=");

    scanf("%d",&n);

    t=n;

    while(t!=0)

    {

        f=1;

        r=t%10;

        for(i=1;i<=r;i++)

        {

            f=f\*i;

        }

        sum=sum+f;

        t=t/10;

    }

    if(sum==n)

    {

        printf("%d is Strong Number\n",n);

    }

    else

    {

        printf("%d is Not Strong Number\n",n);

    }

}

**34. Write a program that shows palindrome number or not.**

**Sample input: 145**

**Output : 145 is not a palindrome number**

#include <stdio.h>

int main()

{

    int n,t,r,sum=0;

    printf("Enter Number=");

    scanf("%d",&n);

    t=n;

    while(t>0)

    {

        r=t%10;

        sum=sum\*10+r;

        t=t/10;

    }

        if(sum==n)

            printf("%d is Palindrome Number",n);

        else

            printf("%d is not Palindrome Number",n);

}

**35. Write a program that shows your given string is palindrome or not.**

**Sample input: ruet**

**Output : ruet is not a palindrome string**

#include <stdio.h>

#include <string.h>

int main()

{

    char a[100],b[100];

    printf("Enter String=");

    gets(a);

    strcpy(b,a);

    strrev(b);

    if(strcmp(a,b)==0)

    {

        printf("%s is Palindrome",a);

    }

    else

    {

         printf("%s is not Palindrome",a);

    }

}

**36. Write a program that convert decimal number to binary number.**

#include <stdio.h>

int main()

{

    int i=0,a[100],n,s=0;

    printf("Enter binary number=");

    scanf("%d",&n);

    while(n>0)

    {

        a[i]=n%10\*pow(2,i);

        n=n/10;

        s=s+a[i];

        i++;

    }

    printf("%d",s);

}

**37. Write a program that convert binary number to decimal number**

#include <stdio.h>

int main()

{

    int a[20];

    int dec,j,i=0;

    printf("Enter the decimal number=");

    scanf("%d",&dec);

    while(dec>0)

    {

        a[i]=dec%2;

        i++;

        dec=dec/2;

    }

    for(j=i-1;j>=0;j--)

    printf("%d",a[j]);

}

**38. Write a program that convert decimal number to hexadecimal number.**

#include <stdio.h>

int main()

{

    int n,i=0,j,a[100];

    printf("Enter Number=");

    scanf("%d",&n);

    while(n!=0)

    {

        a[i]=n%16;

        if(a[i]==10)

        {

            a[i]='A';

        }

        else if(a[i]==11)

        {

            a[i]='B';

        }

        else if(a[i]==12)

        {

            a[i]='C';

        }

        else if(a[i]==13)

        {

            a[i]='D';

        }

        else if(a[i]==14)

        {

            a[i]='E';

        }

        else if(a[i]==15)

        {

            a[i]='F';

        }

        n=n/16;

        i++;

    }

    for(j=i-1;j>=0;j--)

    {

        if(a[j]>=65 && a[j]<=70)

            printf("%c",a[j]);

        else

        {

        printf("%d",a[j]);

        }

    }

}

**39. Write a program that convert decimal number to octal number.**

#include <stdio.h>

int main()

{

    int a[100],i=0,j,n;

    printf("Enter Decimal Number=");

    scanf("%d",&n);

    while(n!=0)

    {

        a[i]=n%8;

        n=n/8;

        i++;

    }

    printf("Octal Number is=");

    for(j=i-1;j>=0;j--)

    {

        printf("%d",a[j]);

    }

}

**40. Write a program that find out the area of any triangle.**

#include <stdio.h>

int main()

{

    int h,b,a;

    printf("Enter Height And Base=");

    scanf("%d%d",&h,&b);

    a=0.5\*b\*h;

    printf("Area OF Triangle Is=%d",a);

}

**41. Write a program that find out the volume and surface area of any cylinder.**

#include <stdio.h>

#define PI 3.141592654

int main()

{

    double r,h,v,a;

    printf("Enter Radius And Height=");

    scanf("%lf%lf",&r,&h);

    v=PI\*r\*r\*h;

    a=2\*PI\*r\*r+2\*PI\*r\*h;

    printf("Volume Is=%0.3lf\n",v);

    printf("Surface Area Is=%0.3lf",a);

}

**42. Write a program that can take any character as a input and show ASCII value**

**of that character.**

#include <stdio.h>

int main()

{

    char a,v;

    printf("Enter Character=");

    scanf("%c",&a);

    v=toascii(a);

    printf("ASCII Value Is=%d",v);

}

**43. Write a program that shows all perfect number of a given range.**

#include <stdio.h>

int main()

{

    int l,u,i,j;

    printf("Enter Lower Limit And Upper Limit=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

        int sum=0,check=0;

        for(j=1;j<i;j++)

        {

            if(i%j==0)

            {

                sum=sum+j;

            }

        }

        if(sum==i)

        {

            check=1;

        }

        if(check==1)

        {

            printf("%d\n",i);

        }

    }

}

**44. Write a program that shows all armstrong number of a given range**.

#include <stdio.h>

int main()

{

    int l,u,i,t,r,f=0;

    printf("Enter Range=");

    scanf("%d%d",&l,&u);

    for(i=l;i<=u;i++)

    {

        t=i;

        int sum=0;

        while(t!=0)

        {

            r=t%10;

            sum=sum+r\*r\*r;

            t=t/10;

        }

        if(sum==i)

        {

            printf("%d\n",i);

            f=1;

        }

    }

    if(f!=1)

    {

        printf("Not Found\n");

    }

}

**45. Write a program that take 10 data from user and find minimum value.**

**Sample input: 10 18 1 29 5 30 4 12 10 98**

**Output : 1**

#include <stdio.h>

int main()

{

    int a[100],i,min,n;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=0;i<n;i++)

    {

        scanf("%d",&a[i]);

    }

    min=a[0];

    for(i=0;i<n;i++)

    {

        if(a[i]<=min)

        {

            min=a[i];

        }

    }

    printf("Minimum is=%d",min);

}

**46. Write a program that take 10 data from user and find maximum value.**

**Sample input: 10 18 1 29 5 30 4 12 10 98**

**Output : 98**

#include <stdio.h>

int main()

{

    int a[100],max=0,n,i;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=0;i<n;i++)

    {

        scanf("%d",&a[i]);

    }

    for(i=0;i<n;i++)

    {

        if(a[i]>max)

        {

            max=a[i];

        }

    }

    printf("Maximum is=%d",max);

}

**47. Write a program to sort the data in ascending order**

**Sample input: 10 18 1 29 5 30 4 12 11 98**

**Output : 1 4 5 10 11 12 18 29 30 98**

#include <stdio.h>

int main()

{

    int a[100],i,j,n,t;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        scanf("%d",&a[i]);

    }

    for(i=1;i<=n;i++)

    {

        for(j=i+1;j<=n;j++)

        {

            if(a[i]>a[j])

            {

                t=a[i];

                a[i]=a[j];

                a[j]=t;

            }

        }

    }

    printf(" Ascending Sorted Array Is=");

    for(i=1;i<=n;i++)

    {

        printf(" %d",a[i]);

    }

    return 0;

}

**48. Write a program to sort the data in descending order**

**Sample input: 10 18 1 29 5 30 4 12 11 98**

**Output : 98 30 29 18 12 11 10 5 4 1**

#include <stdio.h>

int main()

{

    int a[100],i,j,n,t;

    printf("Enter Number=");

    scanf("%d",&n);

    for(i=1;i<=n;i++)

    {

        scanf("%d",&a[i]);

    }

    for(i=1;i<=n;i++)

    {

        for(j=i+1;j<=n;j++)

        {

            if(a[i]<a[j])

            {

                t=a[i];

                a[i]=a[j];

                a[j]=t;

            }

        }

    }

    printf(" Descending Sorted Array Is=");

    for(i=1;i<=n;i++)

    {

        printf(" %d",a[i]);

    }

    return 0;

}

**51. Write a program to add two integer numbers by using function.**

#include <stdio.h>

int sum(int a,int b);

int main()

{

    int c,d;

    printf("Enter Two Number=");

    scanf("%d%d",&c,&d);

    sum(c,d);

}

int sum(int a,int b)

{

    int s=a+b;

    printf("Summation Is=%d",s);

}

**52. Write a program to find a prime number by using function.**

#include <stdio.h>

int prime(int p);

int main()

{

    int a;

    printf("Enter Prime=");

    scanf("%d",&a);

    prime(a);

}

int prime(int p)

{

    int check=1,i;

    for(i=2;i<p;i++)

    {

        if(i%2==0)

        {

            check=0;

            break;

        }

    }

    if(check==1)

    {

        printf("%d is Prime",p);

    }

    else

    {

        printf("%d is not Prime",p);

    }

}

**54. Write a program to find a perfect number by using function.**

#include <stdio.h>

int perfect(int n);

int main()

{

    int p;

    printf("Enter Number=");

    scanf("%d",&p);

    perfect(p);

}

int perfect(int n)

{

    int i,sum=0;

    for(i=1;i<n;i++)

    {

        if(n%i==0)

        {

            sum=sum+i;

        }

    }

    if(sum==n)

    {

        printf("%d is Perfect Number\n",n);

    }

    else

    {

        printf("%d is Not Perfect Number\n",n);

    }

    return 0;

}

**55. Write a program to find factorial of a number by using function.**

#include <stdio.h>

int fact(int a);

int main()

{

    int n;

    printf("Enter Number=");

    scanf("%d",&n);

    fact(n);

}

int fact(int a)

{

    int f=1,i;

    for(i=a;i>=1;i--)

    {

        f=f\*i;

    }

    printf("Factorial is=%d",f);

}