1. Write a program to read in two integers and perform the following operations on them: addition, subtraction, multiplication, division, and modulo.

#include<iostream>

using namespace std;

int main()

{

int m,n,add,sub,mul,div,mod;

cout<<"enter the integer1:";

cin>>m;

cout<<"enter the integer2:";

cin>>n;

add=m+n;

sub=m-n;

mul=m\*n;

div=m/n;

mod=m%n;

cout<<"addition of two numbers:"<<add<<"\n";

cout<<"subtraction of two numbers:"<<sub<<"\n";

cout<<"multiplication of two numbers:"<<mul<<"\n";

cout<<"division of two numbers:"<<div<<"\n";

cout<<"module of two numbers:"<<mod;

return 0;

}

2. Program to determine the integer is odd or even.

#include<iostream>

using namespace std;

int main()

{

int num;

cout<<"enter the number:";

cin>>num;

if(num%2==0)

{

cout<<"even number";

}

else

{

cout<<"odd number";

}

return 0;

}

3.Program to compute the average of three integers.

#include<iostream>

using namespace std;

int main()

{

int m,n,p,avg;

cout<<"enter the integer1:";

cin>>m;

cout<<"enter the integer2:";

cin>>n;

cout<<"enter the integer3:";

cin>>p;

avg=(m+n+p)/3;

cout<<"average of three integers:"<<avg;

return 0;

}

4.Program to check two numbers are equal or not

#include<iostream>

using namespace std;

int main()

{

int num1,num2;

cout<<"enter the number1:";

cin>>num1;

cout<<"enter the number2:";

cin>>num2;

if(num1==num2)

{

cout<<"both are equal numbers";

}

else

{

cout<<"both are not equal numbers";

}

return 0;

}

5. Write a program to read in two Floating numbers and perform the following operations on them: addition, subtraction, multiplication, division, and modulo.

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

float num1,num2,add,sub,mul,div,mod;

cout<<"enter the flaot num1:";

cin>>num1;

cout<<"enter the float num2:";

cin>>num2;

add=num1+num2;

sub=num1-num2;

mul=num1\*num2;

div=num1/num2;

mod=fmod(num1,num2);

cout<<"addition of two float numbers:"<<add<<"\n";

cout<<"subtraction of two float numbers:"<<sub<<"\n";

cout<<"multiplication of two float numbers:"<<mul<<"\n";

cout<<"division of two float numbers:"<<div<<"\n";

cout<<",modula of two float numbers:"<<mod;

}

6.Program to check the character is a vowel or consonant

#include<iostream>

using namespace std;

int main()

{

char ch;

cout<<"enter the character:";

cin>>ch;

if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')

{

cout<<"character is vowel";

}

else

{

cout<<"character is consonant";

}

return 0;

}

7.Program to check the number is positive, negative or zero

#include<iostream>

using namespace std;

int main()

{

int num;

cout<<"enter the number:";

cin>>num;

if(num<0)

{

cout<<"number is negative";

}

else

{

cout<<"number is positive";

}

return 0;

}

8.Program to determine which number is greater among two integers

#include<iostream>

using namespace std;

int main()

{

int num1,num2,num3;

cout<<"enter the number1:";

cin>>num1;

cout<<"enter the number2:";

cin>>num2;

cout<<"enter the number3:";

cin>>num3;

if(num1>num2 && num1>num3)

{

cout<<"number1 is greatest";

}

else if(num2>num1 && num2>num3)

{

cout<<"number2 is greatest";

}

else

{

cout<<"number3 is greatest";

}

return 0;

}

9. Program to read a floating-number and round it to the nearest integer using the floor an ceil functions.

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

float num,floor\_num,ceil\_num,round\_num;

cout<<"enter the number:";

cin>>num;

floor\_num=floor(num);

ceil\_num=ceil(num);

if(num-floor\_num<0.5)

{

round\_num=floor\_num;

}

else

{

round\_num=ceil\_num;

}

cout<<"floor number:"<<floor\_num<<"\n";

cout<<"ceil number:"<<ceil\_num<<"\n";

cout<<"round number:"<<round\_num;

return 0;

}

10. Program to swap two numbers using bitwise XOR operator.

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

int num1,num2;

cout<<"enter the num1:";

cin>>num1;

cout<<"enter the num2:";

cin>>num2;

cout<<"before swapping numbers:\n";

cout<<"num1:"<<num1<<"\n";

cout<<"num2:"<<num2;

num1=num1^num2;

num2=num1^num2;

num1=num1^num2;

cout<<"\nafter swapping numbers:\n";

cout<<"num1:"<<num1<<"\n";

cout<<"num2:"<<num2;

return 0;

}

11. Program to print numbers from 1 to 10 using for loop

#include<iostream>

using namespace std;

int main()

{

int num,i;

cout<<"enter the number:";

cin>>num;

for(i=1;i<=num;i++)

{

cout<<i<<" ";

}

return 0;

}

12. Factorial of a number using for loop

#include<iostream>

using namespace std;

int main()

{

int num,i,fact=1;

cout<<"enter the number:";

cin>>num;

for(i=1;i<=num;i++)

{

fact=fact\*i;

}

cout<<"factorial of number:"<<fact;

return 0;

}

13. Print multiplication table using for loop

#include<iostream>

using namespace std;

int main()

{

int num,i;

cout<<"enter the multiplication table number:";

cin>>num;

for(i=1;i<=10;i++)

{

cout<<num<<"x"<<i<<"="<<num\*i<<"\n";

}

return 0;

}

14. Fibonacci series using for loop

#include<iostream>

using namespace std;

int main()

{

int n1=0,n2=1,n3,num,i;

cout<<"enert the nth fibinocci series:";

cin>>num;

cout<<n1<<”\n”;

cout<<n2<<”\n”;

for(i=2;i<=num;i++)

{

n3=n1+n2;

cout<<n3<<"\n";

n1=n2;

n2=n3;

}

return 0;

}

15. Prime number using for loop

#include<iostream>

using namespace std;

int main()

{

int num,i,fact=0;

cout<<"enter the number:";

cin>>num;

for(i=1;i<num;i++)

{

if(num%i==0)

{

fact=fact+1;

}

}

if(fact==1)

{

cout<<"prime number";

}

else

{

cout<<"not prime number";

}

return 0;

}

16. Sum of all digits using while loop

#include<iostream>

using namespace std;

int main()

{

int num,sum=0;

cout<<"enter the number:";

cin>>num;

while(num!=0)

{

int digit=num%10;

sum=sum+digit;

num=num/10;

}

cout<<"sum of digit:"<<sum;

return 0;

}

17.GCD of two numbers

#include<iostream>

using namespace std;

int main()

{

int n1,n2,r;

cout<<"enter the n1:";

cin>>n1;

cout<<"enter the n2:";

cin>>n2;

while(n1%n2!=0)

{

r=n1%n2;

n1=n2;

n2=r;

}

cout<<"gcd of two numbers:"<<n2;

return 0;

}

18.perfect number or not using loop

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,i;

cout<<"enter the number:";

cin>>num;

for(i=1;i<num;i++)

{

if(num%i==0)

{

sum=sum+i;

}

}

if(sum==num)

{

cout<<"perfect number";

}

else

{

cout<<"not perfect number";

}

return 0;

}

19.Armstrong number or not

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,i,original\_num;

cout<<"enter the number:";

cin>>num;

original\_num=num;

while(num!=0)

{

int digit=num%10;

sum=sum+digit\*digit\*digit;

num=num/10;

}

if(original\_num==sum)

{

cout<<"armstrong number";

}

else

{

cout<<"not armstrong number";

}

}

20.Harshad number or not

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,original\_num;

cout<<"enter the number:";

cin>>num;

original\_num=num;

while(num!=0)

{

int digit=num%10;

sum=sum+digit;

num=num/10;

}

if(original\_num%sum==0)

{

cout<<"harshad number";

}

else

{

cout<<"not harshad number";

}

return 0;

}

1. Strong number or not:

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,original\_num,i;

cout<<"enter the number:";

cin>>num;

original\_num=num;

while(num!=0)

{

int digit=num%10;

int fact=1;

for(i=1;i<=digit;i++)

{

fact=fact\*i;

}

sum=sum+fact;

num=num/10;

}

if(original\_num==sum)

{

cout<<"strong number";

}

else

{

cout<<"not strong number";

}

return 0;

}

1. BUZZ number or not:

#include<iostream>

using namespace std;

int main()

{

int num,r;

cout<<"enter the number:";

cin>>num;

if(num%7==0)

{

cout<<"buzz number";

}

else

{

r=num%10;

if(r==7)

{

cout<<"buzz number";

}

else

{

cout<<"not buzz number";

}

}

return 0;

}

1. Neon number or not:

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,original\_num,square;

cout<<"enter the number:";

cin>>num;

square=num\*num;

while(square1>0)

{

int digit=square%10;

sum=sum+digit;

square=square/10;

}

if(sum==num)

{

cout<<"neon number";

}

else

{

cout<<"not neon number";

}

return 0;

}

1. Abundant number:

#include<iostream>

using namespace std;

int main()

{

int num,sum=0,i;

cout<<"enter the number:";

cin>>num;

for(i=1;i<num/2;i++)

{

if(num%i==0)

{

sum=sum+i;

}

}

if(sum<num)

{

cout<<"abundant number";

}

else

{

cout<<"not abundant";

}

return 0;

}

25.narcissitic number or not:

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

int num,original\_num,sum=0,n;

cout<<"enter the number:";

cin>>num;

original\_num=num;

while(original\_num!=0)

{

original\_num=original\_num/10;

n++;

}

original\_num=num;

while(original\_num!=0)

{

int digit=original\_num%10;

sum=sum+pow(digit,n);

original\_num=original\_num/10;

}

if(sum==num)

{

cout<<"narcissitic number";

}

else

{

cout<<"not narcissitic number";

}

return 0;

}

1. patterns:

#include<iostream>

using namespace std;

int main()

{

int n;

cout<<"enter the number of rows:";

cin>>n;

for(int i=1;i<=n;i++)

{

for(int j=1;j<=i;j++)

{

cout<<"\*";

}

cout<<"\n";

}

return 0;

}

enter the number of rows:5

\*

\*\*

\*\*\*

\*\*\*\*

1. pattern :

#include<iostream>

using namespace std;

int main()

{

int n;

cout<<"enter the number of rows:";

cin>>n;

for(int i=n;i>0;i--)

{

for(int j=i;j>0;j--)

{

cout<<"\*";

}

cout<<"\n";

}

return 0;

}

enter the number of rows:5

\*\*\*\*\*

\*\*\*\*

\*\*\*

\*\*

\*

1. pattern:

#include<iostream>

using namespace std;

int main()

{

int n;

cout<<"enter the number of rows:";

cin>>n;

for(int i=n;i>=1;i--)

{

for(int k=n-i;k>0;k--)

{

cout<<" ";

}

for(int j=i;j>=1;j--)

{

cout<<"\*";

}

cout<<"\n";

}

return 0;

}

enter the number of rows:5

\*\*\*\*\*

\*\*\*\*

\*\*\*

\*\*

\*

1. numbers pattern:

#include<iostream>

using namespace std;

int main()

{

int n;

cout<<"enter the number of rows:";

cin>>n;

for(int i=1;i<=n;i++)

{

for(int j=1;j<=i;j++)

{

cout<<i;

}

cout<<"\n";

}

return 0;

}

enter the number of rows:5

1

22

333

4444

55555

1. Find the sum of all elements in an array:

#include<iostream>

using namespace std;

int main()

{

int arr[20],n,sum=0;

cout<<"enter the size of array:";

cin>>n;

cout<<"enter the elements:";

for(int i=0;i<=n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(int i=0;i<=n;i++)

{

cout<<arr[i];

}

cout<<"\n";

for(int i=0;i<=n;i++)

{

sum=sum+arr[i];

}

cout<<"sum of array elements:"<<sum;

return 0;

}

30.Program to reverse the elements in an array

#include<iostream>

using namespace std;

int main()

{

int arr[20],n;

cout<<"enter the size of array:";

cin>>n;

cout<<"enter the elements:";

for(int i=0;i<n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(int i=0;i<n;i++)

{

cout<<arr[i]<<" ";

}

int start=0;

int end=n-1;

while(start<end)

{

int temp=arr[start];

arr[start]=arr[end];

arr[end]=temp;

start++;

end--;

}

cout<<"\nreversed array:";

for(int i=0;i<n;i++)

{

cout<<arr[i]<<" ";

}

return 0;

}

31.Find the average of all elements in an array

#include<iostream>

using namespace std;

int main()

{

int arr[20],n,sum=0;

cout<<"enter the number of rows:";

cin>>n;

cout<<"enter the elements:";

for(int i=0;i<=n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(int i=0;i<=n;i++)

{

cout<<arr[i]<<"";

}

cout<<"\n";

for(int i=0;i<=n;i++)

{

sum=sum+arr[i];

}

cout<<"sum of array elements:"<<sum<<"\n";

float avg = static\_cast<float>(sum) / n;

cout << "Average of elements in array: " << avg << "\n";

return 0;

}

1. diamond shape pattern:

#include<iostream>

using namespace std;

int main()

{

int n;

cout<<"enter the number of rows:";

cin>>n;

for(int i=1;i<=n;i++)

{

for(int k=n-i;k>0;k--)

{

cout<<" ";

}

for(int j=1;j<=i;j++)

{

cout<<"\* ";

}

cout<<"\n";

}

for(int i=n;i>0;i--)

{

for(int k=n-i;k>0;k--)

{

cout<<" ";

}

for(int j=i;j>0;j--)

{

cout<<"\* ";

}

cout<<"\n";

}

return 0;

}

enter the number of rows:5

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

31.Program to insert an element in an array at a specific position

#include<iostream>

using namespace std;

int main()

{

int arr[20],i,n,m,pos;

cout<<"enter the array size:";

cin>>n;

cout<<"enter the elements:";

for(i=0;i<n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(i=0;i<n;i++)

{

cout<<arr[i];

}

cout<<"enter the element to insert:";

cin>>m;

cout<<"enter the position to insert:";

cin>>pos;

for(int i=n;i>=pos;i--)

{

arr[i]=arr[i-1];

}

arr[pos]=m;

cout<<"array after insertion:";

for(int i=0;i<=n;i++)

{

cout<<arr[i]<<" ";

}

cout<<"\n";

return 0;

}

32.Program to Delete an element in an array at a specific position

#include<iostream>

using namespace std;

int main()

{

int arr[20],i,n,m,pos;

cout<<"enter the array size:";

cin>>n;

cout<<"enter the elements:";

for(i=0;i<n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(i=0;i<n;i++)

{

cout<<arr[i];

}

cout<<"\n";

cout<<"enter the position to delete:";

cin>>pos;

for(int i=pos;i>n-1;i++)

{

arr[i]=arr[i+1];

}

n--;

cout<<"\n";

cout<<"array after deletion:";

for(int i=0;i<n;i++)

{

cout<<arr[i]<<" ";

}

cout<<"\n";

return 0;

}

33.Addition matrix:

#include<iostream>

using namespace std;

int main()

{

int a[10][10],b[10][10],add[10][10],i,j,r,c;

cout<<"enter the number of rows:";

cin>>r;

cout<<"enter the number of columns:";

cin>>c;

cout<<"enter the 1st matrix:";

cout<<"\n";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>a[i][j];

}

cout<<"\n";

}

cout<<"\n";

cout<<"enter 2nd matrix:";

cout<<"\n";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>b[i][j];

}

cout<<"\n";

}

cout<<"addition matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

add[i][j]=a[i][j]+b[i][j];

}

}

cout<<"matrix after additon:";

cout<<"\n";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cout<<add[i][j]<<" ";

}

cout<<"\n";

}

return 0;

}

1. Second largest number:

#include<iostream>

using namespace std;

int main()

{

int arr[10],n,i,j,a;

cout<<"enter the size of array:";

cin>>n;

cout<<"enter the elements:";

for(i=0;i<n;i++)

{

cin>>arr[i];

}

cout<<"original array:";

for(i=0;i<n;i++)

{

cout<<arr[i];

}

for(i=0;i<n;i++)

{

for(j=i+1;j<n;j++)

{

if(arr[i]<arr[j])

{

a=arr[i];

arr[i]=arr[j];

arr[j]=a;

}

}

}

cout<<"\n";

cout<<"descending order:";

for(i=0;i<n;i++)

{

cout<<arr[i];

}

cout<<"\n";

cout<<"second largest number:"<<arr[1];

return 0;

}

1. funation uisng factorial number:

#include<iostream>

using namespace std;

int fact(int n,int fact=1)

{

for(int i=1;i<=n;i++)

{

fact=fact\*i;

}

return fact;

}

int main()

{5

int n;

cout<<"enter the number:";

cin>>n;

int factorial=fact(n);

cout<<"factorial of number:"<<factorial;

return 0;

}

1. prime number or not using function:

#include<iostream>

using namespace std;

bool prime(int n,int fact=0)

{

for(int i=1;i<n;i++)

{

if(n%i==0)

{

fact=fact+1;

}

}

if(fact==1)

{

return true;

}

else

{

return false;

}

}

int main()

{

int n;

cout<<"enter the number:";

cin>>n;

int prime\_num=prime(n);

if (prime\_num){

cout << "Prime number";

}

else{

cout << "Not a prime number";

}

return 0;

}

1. GCD of two numbers:

#include<iostream>

using namespace std;

int gcd(int n1, int n2)

{

while(n1%n2!=0)

{

int r=n1%n2;

n1=n2;

n2=r;

}

return n2;

}

int main()

{

int n1,n2;

cout<<"enter the n1:";

cin>>n1;

cout<<"enter the n2:";

cin>>n2;

int c=gcd(n1,n2);

cout<<"gcd of two numbers:"<<c;

return 0;

}

38.

#include<iostream>

using namespace std;

int max(int arr[10],int n)

{

for(int i=0;i<n;i++)

{

cin>>arr[i];

}

for(int i=0;i<n;i++)

{

for(int j=i+1;j<n;j++)

{

if(arr[i]>arr[j])

{

int a=arr[i];

arr[i]=arr[j];

arr[j]=a;

}

}

}

cout<<"sorted array:";

for(int i=0;i<n;i++)

{

cout<<arr[i];

}

cout<<"max numnber in array:"<<arr[1];

return arr[1];

}

int min(int arr1[10],int n)

{

for(int i=0;i<n;i++)

{

cin>>arr1[i];

}

for(int i=0;i<n;i++)

{

for(int j=i+1;j<n;j++)

{

if(arr1[i]>arr1[j])

{

int a=arr1[i];

arr1[i]=arr1[j];

arr1[j]=a;

}

}

}

cout<<"sorted array:";

for(int i=0;i<n;i++)

{

cout<<arr1[i];

}

cout<<"min numnber in array:"<<arr1[-1];

return arr1[-1];

}

int main()

{

int max\_num=max(arr,n)

int min\_num=min(arr1,n)

cout<<"maximum number:"<<c;

cout<<"minimum number:"<<b;

return 0;

}

1. Area of circle :

#include<iostream>

using namespace std;

float area\_circle(int radius)

{

const float pi=3.142;

float area=pi\*radius\*radius;

return area;

}

int main()

{

float radius;

cout<<"enter the radius of circle:";

cin>>radius;

float area=area\_circle(radius);

cout<<"area of circle :"<<area;

return 0;

}

1. Diagonal sum matrix:

#include<iostream>

using namespace std;

int main()

{

int a[10][10],i,j,r,c;

cout<<"enter the number of rows:";

cin>>r;

cout<<"enter the number of columns:";

cin>>c;

cout<<"enter the matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>a[i][j];

}

}

int diagonal\_sum=0;

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

if (i==j){

diagonal\_sum=diagonal\_sum+a[i][j];

}

}

}

cout<<"sum of diagonal elements:"<<diagonal\_sum;

return 0;

}

1. merge two arrays:

#include<iostream>

using namespace std;

int main()

{

int a[10],b[10],m,n,i;

cout<<"enter the size of a :";

cin>>n;

cout<<"enter the elements:";

for(i=0;i<n;i++)

{

cin>>a[i];

}

cout<<"enter the size of b:";

cin>>m;

for(i=0;i<m;i++)

{

cin>>b[i];

}

int c[n+m];

for(i=0;i<n;i++)

{

c[i]=a[i];

}

for(i=0;i<m;i++)

{

c[n+i]=b[i];

}

cout<<"merged array:";

for(i=0;i<n+m;i++)

{

cout<<c[i];

}

return 0;

}

1. multiplication matrix:

#include<iostream>

using namespace std;

int main()

{

int a[10][10],b[10][10],mul[10][10],i,j,c,r,k;

cout<<"enter the number of rows:";

cin>>r;

cout<<"enter the number of columns:";

cin>>c;

cout<<"enter the 1st matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>a[i][j];

}

cout<<"\n";

}

cout<<"enter 2nd matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>b[i][j];

}

cout<<"\n";

}

cout<<"multiplication matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

mul[i][j]=0;

for(k=0;k<c;k++)

{

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

}

}

}

cout<<"result matrix:"<<"\n";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cout<<mul[i][j]<<" ";

}

cout<<"\n";

}

return 0;

}

1. addition matrix:

#include<iostream>

using namespace std;

int main()

{

int a[10][10],b[10][10],add[10][10],i,j,c,r,k;

cout<<"enter the number of rows:";

cin>>r;

cout<<"enter the number of columns:";

cin>>c;

cout<<"enter the 1st matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>a[i][j];

}

cout<<"\n";

}

cout<<"enter 2nd matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cin>>b[i][j];

}

cout<<"\n";

}

cout<<"addition matrix:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

add[i][j]=a[i][j]+b[i][j];

}

cout<<"\n";

}

cout<<"result:";

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

{

cout<<add[i][j];

}

cout<<"\n";

}

return 0;

}

43.2d dimentional using pointers:

#include<iostream>

using namespace std;

int main()

{

int rows,columns;

cout<<"enter the number of rows:";

cin>>rows;

cout<<"enter the number of columns:";

cin>>columns;

int \*\*arr=new int\*[rows];

for(int i=0;i<rows;i++)

arr[i]=new int[columns];

cout<<"enter the values:";

for(int i=0;i<rows;i++)

{

for(int j=0;j<columns;j++)

{

cin>>arr[i][j];

}

}

cout<<"displayed array is:";

cout<<"\n";

for(int i=0;i<rows;i++)

{

for(int j=0;j<columns;j++)

{

cout<<arr[i][j]<<" ";

}

cout<<"\n";

}

return 0;

}

1. Find the number of occurrences of a value in an array

#include<iostream>

using namespace std;

int main()

{

int arr[10]={1,2,2,3,3,3,4,5,6};

int count[10]={0};

for(int i=0;i<10;i++)

{

count[arr[i]]++;

}

cout<<"number of occurences of values:";

for(int i=0;i<10;i++)

{

if(count[i]>0)

{

cout<<"occuernec:"<<i<<"is"<<count[i];

}

cout<<"\n";

}

return 0;

}

1. pascal triangle:

#include<iostream>

using namespace std;

int main()

{

int rows;

cout<<"enter the number of rows:";

cin>>rows;

for(int i=0;i<rows;i++)

{

for(int j=0;j<rows-i-1;j++)

{

cout<<" ";

}

int value=1;

for(int j=0;j<=i;j++)

{

cout<<value<<" ";

value=value\*(i-j)/(j+1);

}

cout<<"\n";

}

return 0;

}

1. string palindrome or not

#include<iostream>

#include<cstring>

using namespace std;

int main()

{

string str,reversed\_str;

int i;

cout<<"enter the string:";

cin>>str;

reversed\_str="";

for(i=(str.length()-1);i>=0;i--)

{

reversed\_str.push\_back(str[i]);

}

if(reversed\_str==str)

{

cout<<"palindrome";

}

else

{

cout<<"not palindrome";

}

return 0;

}

1. palindome string or not using function

#include<iostream>

#include<cstring>

using namespace std;

bool palindrome(string str)

{

string reversed\_str="";

for(int i=(str.length()-1);i>=0;i--)

{

reversed\_str.push\_back(str[i]);

}

if(str==reversed\_str)

{

return true;

}

else

{

return false;

}

}

int main()

{

string str;

cout<<"enter the string:";

cin>>str;

bool str\_palindrome=palindrome(str);

if(str\_palindrome)

{

cout<<"palindome";

}

else

{

cout<<"not palindrome";

}

return 0;

}

1. find min and max using function

#include<iostream>

using namespace std;

int findmax(int arr[],int size)

{

int max=arr[0];

for(int i=0;i<size;i++)

{

if(max<arr[i])

{

max=arr[i];

}

}

return max;

}

int findmin(int arr[10],int size)

{

int min=arr[0];

for(int i=0;i<size;i++)

{

if(min>arr[i])

{

min=arr[i];

}

}

return min;

}

int main()

{

int arr[10],size;

cout<<"enter the size:";

cin>>size;

cout<<"entre the elements:";

for(int i=0;i<size;i++)

{

cin>>arr[i];

}

int max\_num=findmax(arr,size);

int min\_num=findmin(arr,size);

cout<<"maximum number is:"<<max\_num<<"\n";

cout<<"minimum number is:"<<min\_num;

return 0;

}

1. count number of elements in string :

#include<iostream>

using namespace std;

int count(string str)

{

int count=0;

for(int i=0;i<str.length();i++)

{

if(str[i] !=' ')

{

count++;

}

}

return count;

}

int main()

{

string str;

cout<<"enter the string:";

getline(cin, str);

int elements\_count=count(str);

cout<<"number of elements:"<<elements\_count;

return 0;

}