//Write a program to find the size of data types.

#include<iostream>

using namespace std;

int main()

{

cout<<"size of char is:"<<sizeof(char)<<endl;

cout<<"size of int is :"<<sizeof(int)<<endl;

cout<<"size of float is:"<<sizeof(float)<<endl;

cout<<"size of long is:"<<sizeof(long)<<endl;

cout<<"size of double is:"<<sizeof(double)<<endl;

cout<<"size of long double is:"<<sizeof(long double)<<endl;

return 0;

}

//Write a program that ask user to input a number or character and print ASCII value in c++.

#include<iostream>

using namespace std;

int main()

{

char ch;

int num;

cout<<"Enter any character: ";

cin>>ch;

num=ch;

cout<<"The ASCII value for "<<ch<<" is "<<num;

return 0;

}

//Write a program that convert days into years and week.

#include<iostream>

using namespace std;

int main()

{

int days, years, weeks;

cout<<"Enter days: ";

cin>>days;

years=days/365;

days=days%365;

weeks=days/7;

days=days%7;

cout<<"Years: "<<years<<endl;

cout<<"Weeks: "<<weeks<<endl;

cout<<"Days: "<<days;

return 0;

}

//Write a program that ask user to input two integers and find out minimum number.

#include<iostream>

using namespace std;

int main()

{

int num1, num2;

cout<<"Enter two integers: ";

cin>>num1>>num2;

if(num1<num2)

cout<<num1<<" is minimum number.";

else

cout<<num2<<" is minimum number.";

return 0;

}

//Write a program to print number entered by the user. If user enters negative number, it is skipped.

#include<iostream>

using namespace std;

int main()

{

int num;

cout<<"Enter a number: ";

cin>>num;

if(num>0)

cout<<"You entered :"<<num;

return 0;

}

//Write a program to check whether the number is less than or greater than 10 inputted by the user.

#include<iostream>

using namespace std;

int main()

{

int num;

cout<<"Enter a number: ";

cin>>num;

if(num<10)

cout<<num<<" is less then 10.";

else if(num>10)

cout<<num<<" is greater than 10.";

else

cout<<"Number is 10.";

return 0;

}

//Write a program to check the number entered by the user is even or odd.

#include<iostream>

using namespace std;

int main()

{

int num;

cout<<"Enter a number: ";

cin>>num;

if(num%2==0)

cout<<num<<" is even number.";

else

cout<<num<<" is odd number.";

return 0;

}

/\*Write a program to print the following pattern using do while loop.

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\*/

#include<iostream>

using namespace std;

int main()

{

int i, j;

i=1;

do

{

j=1;

do

{

cout<<"\*"<<" ";

j++;

}

while(j<=i);

cout<<endl;

i++;

}

while(i<=5);

return 0;

}

//Write a program to find Factorial Value of number given by the user, using For loop.

#include<iostream>

using namespace std;

int main()

{

int num;

int fact=1;

cout<<"Enter a number: ";

cin>>num;

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

{

fact=fact\*i;

}

cout<<"Factorial is: "<<fact;

return 0;

}

/\*Write a program that prints the following pattern

\*

\* \* \*

\* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \*

\*/

#include<iostream>

using namespace std;

int main()

{

int i, j, s;

for(i=1;i<=9;i=i+2)

{

for(s=1;s<=9-i;s++)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

}

return 0;

}

/\*Write a program that prints the following pattern.

\* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \*

\* \* \*

\*

\*/

#include<iostream>

using namespace std;

int main()

{

int i, j, s;

for(i=9;i>=1;i=i-2)

{

for(s=1;s<=9-i;s++)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

}

return 0;

}

/\*Write a program that prints the following pattern

\*

\* \* \*

\* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \*

\* \* \*

\*

\*/

#include<iostream>

using namespace std;

int main()

{

int i, j, s;

for(i=1;i<=9;i=i+2)

{

for(s=1;s<=9-i;s++)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

}

cout<<" ";

for(i=9-2;i>=1;i=i-2)

{

for(s=9-2;s>=i;s--)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

cout<<" ";

}

return 0;

}

//Write a program that continually calculates the cube of a number untill the user enters a number that is divisible by both 2 and 3.

#include<iostream>

using namespace std;

int main()

{

int num;

long cube;

int count=0;

cout<<"Enter a positive number: ";

cin>>num;

while(num%2!=0&&num%3!=0)

{

cube=num\*num\*num;

cout<<"Cube of number is :"<<cube<<endl;

count++;

cout<<"Enter positive number: ";

cin>>num;

}

return 0;

}

//Write a program to find Factorial Value of number given by the user, using For loop.

#include<iostream>

using namespace std;

int main()

{

int num;

int fact=1;

cout<<"Enter a number: ";

cin>>num;

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

{

fact=fact\*i;

}

cout<<"Factorial is: "<<fact;

return 0;

}

/\*Write a program that prints the following pattern

\*

\* \* \*

\* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \*

\* \* \*

\*

\*/

#include<iostream>

using namespace std;

int main()

{

int i, j, s;

for(i=1;i<=9;i=i+2)

{

for(s=1;s<=9-i;s++)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

}

cout<<" ";

for(i=7;i>=1;i=i-2)

{

for(s=7;s>=i;s--)

cout<<" ";

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

cout<<"\*"<<" ";

cout<<endl;

cout<<" ";

}

return 0;

}

//Write a program that continually calculates the cube of a number untill the user enters a number that is divisible by both 2 and 3.

#include<iostream>

using namespace std;

int main()

{

int num;

long cube;

int count=0;

cout<<"Enter a positive number: ";

cin>>num;

while(num%2!=0&&num%3!=0)

{

cube=num\*num\*num;

cout<<"Cube of number is :"<<cube<<endl;

count++;

cout<<"Enter positive number: ";

cin>>num;

}

return 0;

}

//Write a program to find Fibonacci Series of a number given by user.

#include<iostream>

using namespace std;

int main()

{

int a, b, next, n, c;

cout<<"How many Fibonacci terms required:";

cin>>n;

a=0;

b=1;

cout<<"Fibonacci terms are"<<endl;

cout<<a<<"\t"<<b;

c=2;

while(c<n)

{

next=a+b;

cout<<"\t"<<next;

c++;

a=b;

b=next;

}

return 0;

}

//Write a program to find Fibonacci Series of a as count given by user. i.e: user enters 5 it show first five numbers of the Fibonacci series.

#include<iostream>

using namespace std;

int main()

{

int a, b, next, n, c;

cout<<"How many Fibonacci terms required:";

cin>>n;

a=0;

b=1;

cout<<"Fibonacci terms are"<<endl;

cout<<a<<"\t"<<b;

c=2;

while(c<n)

{

next=a+b;

cout<<"\t"<<next;

c++;

a=b;

b=next;

}

return 0;

}

//Write a program to add two integers. Make a function add() to add integers and display sum in main() function.

#include<iostream>

using namespace std;

int add(int, int);

int main()

{

int num1, num2, result;

cout<<"Enter two number: ";

cin>>num1>>num2;

result=add(num1, num2);

cout<<"Sum of two number: "<<result;

return 0;

}

int add(int n1, int n2)

{

int a=n1+n2;

return a;

}

//Write a program to find largest integer among the three and display it using function.

#include<iostream>

using namespace std;

int max(int, int, int);

int main()

{

int num1, num2, num3 ,result;

cout<<"Enter three number: ";

cin>>num1>>num2>>num3;

result=max(num1, num2, num3);

cout<<"Largest number among three is: "<<result;

return 0;

}

int max(int n1, int n2, int n3)

{

int m;

if(n1>n2&&n1>n3)

m=n1;

else if(n2>n1&&n2>n3)

m=n2;

else

m=n3;

return m;

}

//Write a program to check whether a number is prime or not using function.

#include<iostream>

using namespace std;

int prime(int);

int main()

{

int p;

cout<<"Enter any number: ";

cin>>p;

prime(p);

return 0;

}

int prime(int i)

{

int j=2, ch=0;

while(j<=i/2)

{

if(i%j==0)

{

cout<<i<<" is not prime number.";

ch=1;

break;

}

else

{

j++;

}

}

if(ch==0)

{

cout<<i<<" is prime number.";

}

return 0;

}

//Write a program to reverse number using while loop in function.

#include<iostream>

using namespace std;

long rev(long);

int main()

{

long num;

cout<<"Enter a number: ";

cin>>num;

rev(num);

return 0;

}

long rev(long n)

{

long b,d=0;

while(n>0)

{

b=n%10;

n=n/10;

d=(d\*10)+b;

}

cout<<"Reverse of number is: "<<d;

return 0;

}

//Write a function which returns nothing and has two integer arguments being passed by reference and sets the smaller of the two numbers to 0.

#include<iostream>

using namespace std;

void zero\_small (int &a, int &b);

int main()

{

int x, y;

cout<<"Enter first number: ";

cin>>x;

cout<<"Enter second number: ";

cin>>y;

zero\_small(x, y);

cout<<"First number is: "<<x;

cout<<"\nSecond number is: "<<y;

return 0;

}

void zero\_small (int &a, int &b)

{

if(a<b)

a=0;

else

b=0;

}

//Write a program by using library function to calculate square root of a number given by user.

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

int num, sqroot;

cout<<"Enter a number: ";

cin>>num;

sqroot=sqrt(num);

cout<<"Square root of number is: "<<sqroot;

return 0;

}

/\*Write a program to take three variables a, b and c from the user and Inside the try block check the condition. If (a-b!=0) then calculate

the value of d. d=(c/(a-b)) and display d otherwise throw the exception.\*/

#include<iostream>

using namespace std;

int main()

{

int a, b, c;

float d;

cout<<"Enter three numbers: ";

cin>>a>>b>>c;

try

{

if(a-b!=0)

{

d=(c/(a-b));

cout<<"Value of d is: "<<d;

}

else

throw(a-b);

}

catch(int i)

{

cout<<"Answer is infinite because a-b is: "<<i;

}

return 0;

}

/\*Assume that you want to generate a table of multiples of any given number. Write a program that allows the user to enter the number

and then generates the table, formatting it into 10 columns and 20 lines. Interaction with the program should look like this (only the first

three lines are show):

7 14 21 28 35 42 49 56 63 70

77 84 91 98 105 112 119 126 133 140

147 154 161 168 175 182 189 196 203 210\*/

#include<iostream>

using namespace std;

int main()

{

int num,i, j;

int l=1;

cout<<"Enter a number: ";

cin>>num;

for(i=1;i<=20;i++)

{

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

{

cout<<num\*l<<"\t";

l++;

}

cout<<endl;

}

return 0;

}

/\*A leap year is a year in which one extra day (February 29) is added to the regular calender. Most of us know that the leap years are the years

that are divisible by 4. For example, 1992 and 1996 are leap years. Most people, however, do not know that there is an exception to this rule:

centennial years are not year years. For example, 1800 and 1900 are not leap years. Furthermore, there is an exception to the exception: centennial

years which are divisible by 400 are leap years. Thus, the year 2000 is a leap year.

make a program that full fills the above criteria using functions. The program should terminate on entering 0. The return type should be Boolean

i.e bool isLeapYear(int);\*/

#include<iostream>

using namespace std;

bool leap(int);

int main()

{

int Vyear;

cout<<"Enter a year:";

cin>>Vyear;

leap(Vyear);

return 0;

}

bool leap(int year)

{

if ((year % 4 == 0 && year % 100 != 0)||(year%400==0))

cout<<year<<" is a leap year";

else

cout<<year<<" is not a leap year";

return 0;

}

/\*Write a complete application to prompt the user for the double radius of a sphere and call method sphere volume to calculate and display the

volume of sphere. Use the following statement to calculate the volume

double volume=(4.0/3.0)\*math.PI\*math>pow(radius, 3)\*/

#include<iostream>

#include<cmath>

#define PI 3.14

using namespace std;

double vol(double );

int main()

{

double radius, volume;

cout<<"Enter radius of sphere: ";

cin>>radius;

vol(radius);

return 0;

}

double vol(double r)

{

double v;

v=((4.0/3.0)\*PI\*pow(r, 3));

cout<<"Volume of sphere is: "<<v;

return 0;

}

//Write a program that ask user to input length of the array and elements of the array and then sort the array in ascending order using bubble sort.

#include<iostream>

using namespace std;

int main()

{

int a[100], i, j, x, n;

cout<<"Enter length of array: ";

cin>>n;

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

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

cin>>a[i];

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

{

for(i=0;i<n-1;i++)

{

if(a[i]>a[i+1])

{

x=a[i+1];

a[i+1]=a[i];

a[i]=x;

}

}

}

cout<<"\nThe sorted array: \n";

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

cout<<a[i]<<" ";

return 0;

}

//Write a program that takes two 3\*3 matrix elements from the user and add them to form a third matrix.

#include<iostream>

using namespace std;

int main()

{

int r, c, a[3][3], b[3][3], add[3][3], i, j;

cout << "Enter number of rows: ";

cin >> r;

cout << "Enter number of columns: ";

cin >> c;

cout << endl << "Enter elements of 1st matrix: " << endl;

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

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

{

cout << "Enter element a" << i + 1 << j + 1 << " : ";

cin >> a[i][j];

}

cout << endl << "Enter elements of 2nd matrix: " << endl;

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

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

{

cout << "Enter element b" << i + 1 << j + 1 << " : ";

cin >> b[i][j];

}

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

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

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

cout << endl << "After adding two matrix is: " << endl;

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

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

{

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

if(j == c - 1)

cout << endl;

}

return 0;

}

/\*Write a program that ask user for number of rows and columns to form a matrix and then ask for elements of the matrix

after taking the elements it shows the matrix and then transpose the matrix\*/

#include<iostream>

using namespace std;

int main()

{

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

cout<<"Enter number of rows(between 1 to 100): ";

cin>>r;

cout<<"Enter number of columns(between 1 and 100): ";

cin>>c;

cout<<"Enter elements of matrix: "<<endl;

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

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

{

cout<<"Enter elements a"<<i+1<<j+1<<" : ";

cin>>a[i][j];

}

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

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

{

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

if(j==c-1)

cout<<endl;

}

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

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

{

t[j][i]=a[i][j];

}

cout<<"Transpose of the matrix: \n";

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

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

{

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

if(j==r-1)

cout<<endl;

}

return 0;

}

/\*Write a program which takes size of the array from user and elements as well and then ask the user to enter element to search in the

array with the help of linear search using recursion then display that the elements is found or not.\*/

#include<iostream>

using namespace std;

int recursiveLinearSearch(int array[], int element, int size)

{

size=size-1;

if(size<0)

{

return -1;

}

else if(array[size]==element)

{

return 1;

}

else

{

return recursiveLinearSearch(array, element, size);

}

}

int main()

{

int size, element, result;

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

cin>>size;

int array[size], i;

cout<<"Enter elements of the array: ";

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

{

cin>>array[j];

}

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

{

cout<<"array[ " <<a<<" ] =";

cout<<array[a]<<endl;

}

cout<<"Enter element to search in array: ";

cin>>element;

result=recursiveLinearSearch(array,element,size--);

if(result==1)

{

cout<<"Element Found in array";

}

else

{

cout<<"Element not found in array.";

}

return 0;

}

//Write a program which takes array size and elements from the user and sort the array using bubble sort

#include<iostream>

using namespace std;

int main()

{

int array[100], n,i, j, temp;

cout<<"Enter array size: ";

cin>>n;

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

{

cout<<"Enter elements: ";

cin>>array[i];

}

cout<<"The original values in array:\n";

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

cout<<array[i]<<" ";

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

for(j=0;j<n-1;j++)

if(array[j]>array[j+1])

{

temp=array[j];

array[j]=array[j+1];

array[j+1]=temp;

}

cout<<"\nThe sorted array:\n";

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

cout<<array[i]<<" ";

return 0;

}

/\*Write a program that takes an array from the user (array length and elements of the array) then display it and then move all ones at the end of the array.

like display: 5, 1, 6, 1, 1, 3, 9, 0, 6, 7, 8, 12, 10, 1, 2

After moving 1 at the end 5, 6, 3, 9, 0, 6, 7, 8, 12, 10, 2, 1, 1, 1, 1\*/

#include<iostream>

using namespace std;

void OneToEnd(int arr[], int n)

{

int count =0;

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

if(arr[i]!=1)

arr[count++]=arr[i];

while(count<n)

arr[count++]=1;

}

int main()

{

int array[100], n,i;

cout<<"Enter array size: ";

cin>>n;

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

{

cout<<"Enter elements: ";

cin>>array[i];

}

OneToEnd(array, n);

cout<<"Array after pushing all 1 to end of array\n";

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

cout<<array[i]<<" ";

return 0;

}

//Write a program that continually calculates the cube of a number untill the user enters a number that is divisible by both 2 and 3.

#include<iostream>

using namespace std;

int main()

{

int num;

long cube;

int count=0;

cout<<"Enter a positive number: ";

cin>>num;

while(num%2!=0&&num%3!=0)

{

cube=num\*num\*num;

cout<<"Cube of number is :"<<cube<<endl;

count++;

cout<<"Enter positive number: ";

cin>>num;

}

return 0;

}

/\*Assume that you want to generate a table of multiples of any given number. Write a program that allows the user to enter the number

and then generates the table, formatting it into 10 columns and 20 lines. Interaction with the program should look like this (only the first

three lines are show):

7 14 21 28 35 42 49 56 63 70

77 84 91 98 105 112 119 126 133 140

147 154 161 168 175 182 189 196 203 210\*/

#include<iostream>

using namespace std;

int main()

{

int num,i, j;

int l=1;

cout<<"Enter a number: ";

cin>>num;

for(i=1;i<=20;i++)

{

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

{

cout<<num\*l<<"\t";

l++;

}

cout<<endl;

}

return 0;

}

/\*Write a temperature conversion program that gives the user the option of converting Fahrenheit to Celsius or Celsius to Fahrenheit.

To convert Fahrenheit to Celsius use formula: (5.0/9.0\*(temperature-32.0)) and to convert Celsius to Fahrenheit the change the formula

accordingly. Then carry out the conversion. Use floating point numbers. Interaction with the program may look like this:

Type 1 to convert Fahrenheit to Celsius,

2 to convert Celsius to Fahrenheit.

\*/

#include<iostream>

using namespace std;

int main()

{

float cel, far;

int choice;

cout<<"Enter your choice:(only 1 or 2) ";

cin>>choice;

if(choice==1)

{

cout<<"Enter temperature in Fahrenheit: ";

cin>>far;

cel=(5.0/9.0\*(far-32.0));

cout<<"After converting Fahrenheit to Celsius: "<<cel;

}

else if(choice==2)

{

cout<<"Enter temperature in Celsius: ";

cin>>cel;

far=(9.0/5.0\*(cel+32.0));

cout<<"After converting Celsius to Fahrenheit : "<<far;

}

else

cout<<"Invalid choice.";

return 0;

}

/\*Create the equivalent of a four function calculator. The program should ask the user to enter a number, an operator, and another number.

It should then carry out the specified arithmetical operation: adding, subtracting, multiplying, or dividing the two numbers. Use a switch

statement to select the operation. Finally, display the result. When it finishes the calculation, the program should ask whether the user wants

to do another calculation. The response can be 'y' or 'n'\*/

#include<iostream>

using namespace std;

int main()

{

float a, b;

char op, ch;

cout<<"Enter First number, an operator and second number: ";

cin>>a>>op>>b;

do

{

switch(op)

{

case '+':

cout<<a<<op<<b<<"="<<a+b;

break;

case '-':

cout<<a<<op<<b<<"="<<a-b;

break;

case '\*':

cout<<a<<op<<b<<"="<<a\*b;

break;

case '/':

cout<<a<<op<<b<<"="<<a/b;

break;

default:

cout<<"Invalid operator!";

}

cout<<"\nEnter your choice:(only y or n) ";

cin>>ch;

if(ch=='y')

{

cout<<"Enter First number, an operator and second number: ";

cin>>a>>op>>b;

}

}

while(ch!='n');

}

//Write a program to checks an alphabet is vowel or consonant.

#include<iostream>

using namespace std;

int main()

{

char ch;

cout<<"Enter a character(a to z or A to Z): ";

cin>>ch;

switch(ch)

{

case 'a':

case 'A':

cout<<ch<<" is vowel";

break;

case 'e':

case 'E':

cout<<ch<<"is vowel";

break;

case 'i':

case 'I':

cout<<ch<<" is vowel";

break;

case 'o':

case 'O':

cout<<ch<<"is vowel";

break;

case 'u':

case 'U':

cout<<ch<<"is vowel";

break;

default:

cout<<ch<<" is a consonant";

}

return 0;

}

//Write a program that find greatest common divisor using recursion.

#include<iostream>

using namespace std;

int gcd(int n, int m)

{

if((n>=m)&&(n%m)==0)

return m;

else

gcd(m, (n%m));

}

int main()

{

int a, b, result;

cout<<"Enter two number: ";

cin>>a>>b;

result=gcd(a, b);

cout<<"Greatest Common Divisor is: "<<a<<" and "<<b<<" is :"<<result;

return 0;

}

//Write a program to compute cosine, arc sine and tangent of a number given by user

#include<iostream>

#include<cmath>

using namespace std;

int main()

{

float number;

cout<<"Enter a number: ";

cin>>number;

cout<<"The cosine of number is: "<<cos(number)<<endl;

cout<<"The arc sin of number is : "<< asin(number)<<endl;

//if the argument is greater than 1 or less then -1, asin() returns nan i.e. not a number.

cout<<"The tangent of number is: "<<tan(number);

return 0;

}

/\*Write a program to search a particular number in array using Binary search the element of the array are

{5, 10, 15, 20, 30, 40, 50, 60, 70, 80};\*/

#include<iostream>

using namespace std;

int main()

{

int array[10]={5, 10, 15, 20, 30, 40, 50, 60, 70, 80};

int n, i, mid, start, end, loc;

loc=-1;

start=0;

end=9;

cout<<"Enter any number to find: ";

cin>>n;

while(start<=end)

{

mid=(start+end)/2;

if(array[mid]==n)

{

loc=mid;

break;

}

else if(n<array[mid])

end=mid-1;

else

start=mid+1;

}

if(loc==-1)

cout<<n<<" Not found!"<<endl;

else

cout<<n<<" Found at index "<<loc<<endl;

return 0;

}

/\*Write a program to enter any ten strings like names to sort them in alphabetical order then display the sorted string in alphabetical order

on the screen by using string function. The strings will be inserted by the user so do not mention string in code.\*/

#include<iostream>

#include<cstring>

using namespace std;

int main()

{

char str[10][20], t[20];

int i, j;

cout<<"enter any ten string(name) : ";

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

{

cin>>str[i];

}

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

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

{

if(strcmp(str[j-1], str[j])>0)

{

strcpy(t, str[j-1]);

strcpy(str[j-1],str[j]);

strcpy(str[j],t);

}

}

cout<<"Strings (Name) in alphabetical order : \n";

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

{

cout<<str[i]<<"\n";

}

return 0;

}

//Write a program to add two integers. Make a function add() to add integers and display sum in main() function.

#include<iostream>

using namespace std;

int add(int, int);

int main()

{

int num1, num2, result;

cout<<"Enter two number: ";

cin>>num1>>num2;

result=add(num1, num2);

cout<<"Sum of two number: "<<result;

return 0;

}

int add(int n1, int n2)

{

int a=n1+n2;

return a;

}

/\*Write a program that asks the user to type a positive integer. When the user types a negative value the program writes ERROR and

asks for another value. When the user types 0, that means that the last value has been typed and the program must write the average

of the integers. If the number of typed values is zero the program writes 'NO AVERAGE' .\*/

#include<iostream>

using namespace std;

int main()

{

int x;

double average, sum=0.0, max=0;

do

{

cout<<"Enter positive integer: ";

cin>>x;

sum+=x;

max++;

if(x<0)

cout<<"ERROR"<<endl;

}

while(x!=0);

if(max==0)

cout<<"NO AVERAGE";

else

{

average=sum/max;

cout<<"The average is: "<<average;

}

return 0;

}

/\*Write a program which read two times (in hours, minutes and seconds) given by the user and calculate the total times that addition of

two times and converts the resulting time into weeks, months and years.\*/

#include<iostream>

using namespace std;

int main()

{

int hours1, minute1, second1, hours2, minute2, second2;

long sec, s;

int hours, second, minute, days, year, month, week;

cout<<"Enter first time:(h:m:s) ";

cin>>hours1>>minute1>>second1;

cout<<"Enter second time:(h:m:s) ";

cin>>hours2>>minute2>>second2;

s=((hours1+hours2)\*3600)+((minute1+minute2)\*60)+(second1+second2);

sec=s;

hours=sec/3600;

sec=sec%3600;

minute=sec/60;

second=sec%60;

cout<<"After adding time: "<<hours<<" : "<<minute<<" : "<<second<<endl;

days=s/86400;

year=days/365;

days=days%365;

month=days/30;

days=days%30;

week=days/7;

days=days%7;

cout<<"Year, month, week and day of time is: "<<year<<"\t"<<month<<"\t"<<week<<"\t"<<days;

return 0;

}

/\*A bank charges Rs. 10 per month plus the following cheque fees for a commercial account cheque: Bank charges

i. Rs 10 for each cheque, if count is less than 20 cheques

ii. Rs 8 for each cheque, if count is between 20-39 Cheques

iii. Rs 6 for each cheque, if count is between 40-59 cheques

iv. Rs 5 for each cheque, if count is 60 cheques or more

The bank also charges Rs 15 per cheque, if the remaining account balance is below Rs. 400 (before any cheque any fee applied).

Write a program that asks user for the opening account balance and the number of Cheque issued. Compute and display the bank

services fee for the month\*/

#include<iostream>

using namespace std;

double get\_balance() {

double balance;

cout << "What is your account's balance?\n" ;

cin >> balance;

return balance;

}

int get\_checks\_written() {

int checks\_written;

cout << "How many checks did you write?\n";

cin >> checks\_written;

return checks\_written;

}

double compute\_charges(double balance, int checks\_written) {

// fees is initialized as 0 so I can add to it later on.

double fees = 0;

if(balance < 400) {

fees = fees + 15;

}

if(checks\_written < 20) {

fees = fees + 10 \* checks\_written;

} else if(checks\_written < 40) {

fees = fees + 8 \* checks\_written;

} else if(checks\_written < 60) {

fees = fees + 6 \* checks\_written;

} else {

fees = fees + 5 \* checks\_written;

}

return fees;

}

int main() {

double balance = get\_balance();

int checks\_written = get\_checks\_written();

double charges;

// Input validation

if(checks\_written < 0) {

cout << "Cannot accept a negative number of checks written.\n ";

cout<<"The transaction will not complete.\n" ;

} else {

// Input validation

if(balance < 0) {

cout << "Warning: your account is overdrawn.\n" ;

}

charges = compute\_charges(balance, checks\_written);

cout << "Service fees: Rs." << charges <<endl;

}

return 0;

}