#include<iostream>

using namespace std;

template<class T> void print(T a[], int n)

{

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

{

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

}

cout<<endl;

}

template<class T> void bubble(T a[], int n)

{

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

{

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

{

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

{

T temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

}

int main ()

{

// int a[5] = { 10, 35, 32, 13, 26};

//int n = sizeof(a)/sizeof(a[0]);

int a[20],n=5;

cout<<"entert the elements"<<endl;

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

{

cin>>a[i];

}

cout<<"Before sorting array elements are - "<<endl;

print(a, n);

bubble(a, n);

cout<<"After sorting array elements are - "<<endl;

print(a, n);

}

entert the elements

5

78

69

12

53

Before sorting array elements are -

5 78 69 12 53

After sorting array elements are -

5 12 53 69 78

#include<iostream>

using namespace std;

int main()

{

int a=5;

int b=0;

try

{

if(b==0)

{

// throw b;

throw runtime\_error("divison by zero");

}

int div=a/b;

cout<<"division is "<<div;

}

catch (exception& e)

{

// cout<<" exception due to "<<b<<endl;

cout<<"exception "<<e.what();

}

//cout<<"end ";

}

exception divison by zero

#include <iostream>

using namespace std;

template <class T>

int swap\_numbers(T& x, T& y)

{

T t;

t = x;

x = y;

y = t;

return 0;

}

int main()

{

int a, b;

a = 10, b = 20;

cout<<"before swap a="<<a<<" "<<"b= "<<b<<endl;

swap\_numbers(a, b);

cout << a << " " << b << endl;

return 0;

}

before swap a=10 b= 20

20 10

/\*WAP Simple calculator using Class template\*/

#include<iostream>

using namespace std;

template<class T> class calculator

{

T a,b;

public:

calculator(T a,T b)

{

this->a=a;

this->b=b;

}

T sum()

{

T ans=a+b;

cout<<"the sum is "<<ans<<endl;

}

T divison()

{

T ans=a/b;

cout<<"the divison is "<<ans<<endl;

}

T multi()

{

T ans=a\*b;

cout<<"the multiplication is "<<ans<<endl;

}

T subtract()

{

T ans=a-b;

cout<<"the subtraction is "<<ans<<endl;

}

};

int main()

{

calculator<float> a1(10.25,5.2); //class\_name<datatype> object\_name

a1.sum();

a1.multi();

a1.divison();

a1.subtract();

}

the sum is 15.45

the multiplication is 53.3

the divison is 1.97115

the subtraction is 5.05

#include<iostream>

#include<fstream>

using namespace std;

int main()

{

ifstream fin("record 1.txt");

ofstream fout("record 2.text");

char c;

while((c=fin.get())!=EOF)

{

fout<<c;

}

cout<<"file successfully copied ";

}

#include <iostream>

#include <fstream>

using namespace std;

int main()

{

ofstream fout("example.txt");

if (fout.is\_open())

{

fout<<"hello world "<<endl;

fout<<"this is file content ";

fout.close();

cout<<"written succesfully "<<endl;

} else {

cout<<"error" <<endl;

}

return 0;

}

#include<iostream>

#include<fstream>

using namespace std;

int main()

{

ifstream fin("c:\\Users\\Admin\\Desktop\\coding\\c.cpp");

char c;

fin.seekg(10,ios::beg);

while((c=fin.get())!=EOF)

{

cout.put(c);

}

}

#include<iostream>

#include<fstream>

using namespace std;

int main()

{

ofstream fout("student.txt",ios::app);

char name[20];

int rollno;

cout<<"enter the name "<<endl;

cin>>name;

cout<<"enter the rollno "<<endl;

cin>>rollno;

fout.seekp(10,ios::beg);

fout<<name<<endl;

fout<<rollno<<endl;

return 0;

}