#include<iostream>

#include<string>

using namespace std;

int main()

{

string s0;

string s1("hello"); //intialize

string s2="hello world"; //intialize

string s3(s2); //copy to another string

string s4=s3;

char a[]={'a','b','c','\0'};

string s5(a);

cout<<s0<<endl;

cout<<s1<<endl;

cout<<s3<<endl;

cout<<s4<<endl;

cout<<s5<<endl;

if(s0.empty()) //to check whether str is empty

{

cout<<"s0 is empty"<<"\n";

}

//to append a string

s0.append("i love c++");

cout<<s0<<endl;

s0=s0+" and flutter";

cout<<s0<<endl;

// to calculate the length of string

cout<<s0.length()<<endl;

//to remove content of string

s0.clear();

cout<<s0.length()<<endl;

//to compare two string

s0="apple";

s1="mango";

cout<<s0.compare(s1)<<endl;

//0->equal ; <0 and >0 if not equal acc to lexo order

//to check which string is smaller and bigger lexo

if(s1>s0)

{

cout<<s1<< " is bigger than " << s0 <<endl;

}

else

cout<<s0<<" is bigger than " << s1 <<endl;

// to access ith char

cout<<s1[0]<<endl;

// find substrings

string s="i want apple juice";

int index=s.find("apple");

cout<<index<<endl;

//to remove a word from string

string word="apple";

int len=word.length();

s.erase(index,len+1);

cout<<s<<endl;

//iterate

for(int i=0;i<s1.length();i++)

{

cout<<s1[i]<<":";

}

cout<<endl;

//iterators

for(auto it=s1.begin();it!=s1.end();it++)

{

cout<<(\*it)<<":";

}

cout<<endl;

// for each loop

for(auto c:s1)

{

cout<<c<<":";

}

cout<<endl;

}