**Create a function called sum ( ) that returns the sum of the elements of an array. Make this function into a template so it will work with any numerical type. Write a main ( ) program that applies this function to data of various type.**

**#include <iostream>**

**#define SUCCESS 0**

**using namespace std;**

**template < typename T>**

**T sum(T array[],int n)**

**{**

**T s= 0;**

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

**{**

**s+=array[i];**

**}**

**return s;**

**}**

**int main()**

**{**

**int num[] = {4,5,6};**

**float fnum[] = {4.0,3.0,5.5};**

**cout << sum(num,3) << endl;**

**cout << sum(fnum,3) << endl;**

**return SUCCESS;**

**}**

**#include<iostream>//or**

**using namespace std;**

**template<typename T>**

**T sum(T \*a,int n)**

**{**

**T addition=0;**

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

**{**

**addition=addition+\*(a+i);**

**}**

**return addition;**

**}**

**int main()**

**{**

**int num[]={3,5,14,23,26};**

**cout<<"The sum of integers is: "<<sum(num,5)<<endl<<endl;**

**float fnum[]={3.5,4.3,35.46,24.67,45.66};**

**cout<<"The sum of floats is: "<<sum(fnum,5)<<endl<<endl;**

**return 0;**

**}**