**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;
}
```