```cpp
#include <iostream.h>

int sum(int *, int);
//int sum(int [],int);


int main()
{

        /**/

        //passing dynamic arrays to functions
        int size = 0;
        cout << "Enter the array size: ";
        cin >> size;
        int *A = new int[size];
        for(int i=0; i<size; i++)
                A[i] = i;
        int Sum = sum(A,size);
        cout << "The sum is: " << Sum << endl;
        delete [] A;
        A = NULL;

        /**/


        //shallow versus deep copies
        int *X = new int[3];
        for(int k=0; k<3; k++)
                X[k] = k+1;

        int *B = new int;
        B = X;   //B is a shallow copy of X

        int *C = new int;
        *C = *X;   //1st element of C is set to current value
                        //of 1st element of X

        int *D = new int;
        for(int j=0; j<3; j++)
                D[j] = X[j];   //D is a deep copy of X


        delete [] X;


        */
        return 0;

}

int sum(int *B, int size)
//int sum(int B[],int size)
{
        int temp = 0;
        for(int i=0; i < size; i++)
                temp += B[i];
```

```
        return temp;
}
```