Array and Function

Just like regular variables, array can be passed into functions

When Passing array into functions, consider this first:
- Passing the entire array
Or
- Passing only one data from the array
Pass by value or Pass by reference

- The entire array is always pass by reference
- A single data from the array (int, double, string, bool, char, etc...) always pass by value
//in calling function
int main(){
    int grades[10];
    readIn( grades, 10 ); //pass the entire array
    printAll( grades, 10 );
}

//declare the called functions
void readIn( int a[ ], int cap );
void printAll( int a[ ], int cap );
//in calling function
int main(){
    int grades[10];
    print( grades[9] ); //pass the last data in the array
    update( grades[0] ); //pass the first data in the array
}

//declare the called functions
void print( int data );
//use & to have the argument pass by reference
void update( int &data );
Pass 2D-Array

//in calling function
int main(){
    int grades[2][3];
    printAll( grades, 2, 3 );//pass the entire array
}

//declare the called functions
void printAll( int arr[][3], int row_size, int col_size );

- Column size of the 2D array **MUST** be specified,
- A locally declared array can NOT be return to the calling function.

DON’T do the following:

```c++
int[ ] getInput(){
    int grades[5];
    for ( int i = 0; i < 5; i++)
        cin >> grades[ i ];
    return grades;
}
```