

Reverse Diagonal

Write a function that reverses both the diagonals of a two-dimensional array with 4 rows and 4 columns but does not move any other elements of the array.

```
void reverse_diagonal(int array[][4]);
```

Files We Give You: A `makefile` and a sample main program (`diagonal.cpp`) to test your solution. The executable file created by a successful build will be named `diagonal`.

File You Must Submit: Place your solution code in a file named `solution.cpp`. This will be the only file you submit.

Examples

Input:

```
array = {{21, 26, 31, 36},
         {41, 46, 51, 56},
         {61, 66, 71, 76},
         {81, 86, 91, 96}}
```

Array before function is called:

21	26	31	36
41	46	51	56
61	66	71	76
81	86	91	96

Output:

```
array = {{96, 26, 31, 81},
         {41, 71, 66, 56},
         {61, 51, 46, 76},
         {36, 86, 91, 21}}
```

Array after function has been called (elements that were moved are shown in red):

96	26	31	81
41	71	66	56
61	51	46	76
36	86	91	21

Input:

```
array = {{35, 12, 27, 84},  
         {62, 19, 81, 32},  
         {74, 53, 29, 41},  
         {23, 60, 37, 15}}
```

Array before function is called:

35	12	27	84
62	19	81	32
74	53	29	41
23	60	37	15

Output:

```
array = {{15, 12, 27, 23},  
         {62, 29, 53, 32},  
         {74, 81, 19, 41},  
         {84, 60, 37, 35}}
```

Array after function has been called (elements that were moved are shown in red):

15	12	27	23
62	29	53	32
74	81	19	41
84	60	37	35