

Matrix

1.0

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Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

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Chapter 2

File Documentation

2.1 find.c File Reference

```
#include <stdio.h>
```

Functions

- void `trick()`
- int `main()`
- if `((op=fopen(name, "a")) != NULL)`
- else `printf("\nFile not found!\n")`

Variables

- void input * `char`

2.1.1 Function Documentation

2.1.1.1 if()

```
if (
    (op=fopen(name, "a")) != NULL )
```

2.1.1.2 main()

```
int main ( )
```

2.1.1.3 printf()

```
else printf (
    "\nFile not found!\n" )
```

2.1.1.4 trick()

```
void trick ( )
```

2.1.2 Variable Documentation

2.1.2.1 char

```
void input char
```

Initial value:

```
{
    FILE* op
```

2.2 matrix.c File Reference

Functions for 'matrix' library.

```
#include "matrix.h"
#include <stdio.h>
```

Functions

- int [readfile](#) ([char](#) *file, [fmatrix](#) inp)
function readfile
- float [add](#) ([fmatrix](#) inp, int part)
function add
- float [min](#) ([fmatrix](#) inp, int part)
function min
- float [max](#) ([fmatrix](#) inp, int part)
function max

2.2.1 Detailed Description

Functions for 'matrix' library.

2.2.2 Function Documentation

2.2.2.1 add()

```
float add (
    fmatrix inp,
    int part )
```

function add

Author

Mary Smith

Version

1.0

Date

November 2020

Warning

Function made for educating purposes only

Function for counting the sum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>s</i>	The sum of given part

2.2.2.2 max()

```
float max (
    fmatrix inp,
    int part )
```

function max

Author

Mary Smith

Version

1.0

Date

November 2020

Warning

Function made for educating purposes only

Function for finding the maximum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>max</i>	The maximum element of given part

2.2.2.3 min()

```
float min (
    fmatrix inp,
    int part )
```

function min

Author

Mary Smith

Version

1.0

Date

November 2020

Warning

Function made for educating purposes only

Function for finding the minimum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>min</i>	The minimum element of given part

2.2.2.4 readfile()

```
int readfile (
    char * file,
    fmatrix inp )
```

function readfile

Author

Mary Smith

Version

1.0

Date

November 2020

Warning

Function made for educating purposes only

Function for opening .txt files and reading input values (4x4 array)

Parameters

in	<i>file</i>	Input file name
in	<i>inp</i>	Matrix variable

2.3 matrix.h File Reference**Macros**

- #define `h_matrix`

Typedefs

- typedef float `mtrx`[4][4]
- typedef `mtrx` * `fmatrix`

Functions

- int `readfile` (`char` *, `fmatrix`)
function readfile
- float `add` (`fmatrix`, int)
function add
- float `min` (`fmatrix`, int)
function min
- float `max` (`fmatrix`, int)
function max

2.3.1 Macro Definition Documentation

2.3.1.1 `h_matrix`

```
#define h_matrix
```

2.3.2 Typedef Documentation

2.3.2.1 `fmatrix`

```
typedef mtrx* fmatrix
```

2.3.2.2 `mtrx`

```
typedef float mtrx[4][4]
```

2.3.3 Function Documentation

2.3.3.1 add()

```
float add (
    fmatrix inp,
    int part )
```

function add

Author

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Version

1.0

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Function made for educating purposes only

Function for counting the sum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>s</i>	The sum of given part

2.3.3.2 max()

```
float max (
    fmatrix inp,
    int part )
```

function max

Author

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Version

1.0

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November 2020

Warning

Function made for educating purposes only

Function for finding the maximum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>max</i>	The maximum element of given part

2.3.3.3 min()

```
float min (
    fmatrix inp,
    int part )
```

function min

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Version

1.0

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November 2020

Warning

Function made for educating purposes only

Function for finding the minimum of elements in the given fragment

Parameters

in	<i>inp</i>	Matrix variable
in	<i>part</i>	Matrix part
out	<i>min</i>	The minimum element of given part

2.3.3.4 readfile()

```
int readfile (  
    char * file,  
    fmatrix inp )
```

function readfile

Author

Mary Smith

Version

1.0

Date

November 2020

Warning

Function made for educating purposes only

Function for opening .txt files and reading input values (4x4 array)

Parameters

in	<i>file</i>	Input file name
in	<i>inp</i>	Matrix variable

2.4 Source.c File Reference

```
#include <matrix.h>  
#include <stdio.h>  
#include <unistd.h>  
#include <string.h>  
#include <stdlib.h>
```

Functions

- void `printhelp` ()
- void `printerror` ()
- int `main` (int argc, char *argv[])

2.4.1 Function Documentation

2.4.1.1 main()

```
int main (  
    int argc,  
    char * argv[] )
```

2.4.1.2 printerror()

```
void printerror ( )
```

2.4.1.3 printhelp()

```
void printhelp ( )
```