Project_C

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Chapter 1

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2.1 File List

Here is a list of all files with brief descriptions:

Chapter 3

File Documentation

3.1 Contribution au projet/sources/automate.c File Reference

```
#include "Automate.h"
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <math.h>
```

Include dependency graph for automate.c: This graph shows which files directly or indirectly include this file:

Functions

- int * alloc_tab_1D (int t1)
- int *** alloc_mat_vide (int d1, int d2)
- automate generator_automate ()

3.1.1 Function Documentation

3.1.1.1 alloc_mat_vide()

```
int*** alloc_mat_vide (
            int d1,
            int d2 )
```

3.1.1.2 alloc_tab_1D()

```
int* alloc_tab_1D (
            int t1 )
```

Returns

3.1.1.3 generator_automate()

```
automate generator_automate ( )
```

Returns

3.2 Projet_C/sources/automate.c File Reference

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <math.h>
#include "Automate.h"
#include "main.c"
```

Include dependency graph for automate.c: This graph shows which files directly or indirectly include this file:

Functions

- void affichage_1D (int ∗tab, int dim_tab_1D)
- void affichage_case_tab_1D (int ∗tab, int position, int dim_tab_1D)
- void affichage_2D (int ∗∗tab, int dim_tab_2D_ligne, int dim_tab_2D_col)
- void affichage_case_tab_2D (int ∗∗tab, int position_line, int position_col, int dim_tab_2D_ligne, int dim_tab↩ _2D_col)
- void affichage_ligne_mat (int ∗∗∗tab, int position_line, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_col_mat (int ∗∗∗tab, int position_col, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_case_mat (int ∗∗∗tab, int position_line, int position_col, int dim_tab_3D_ligne, int dim_tab_↩ 3D_col)
- void affichage_automate (automate a)
- void lecture_etats_finaux (automate a)
- void echange (int ∗a, int ∗b)
- void affichage_mot (mot ∗mot)
- void lecture_mot (mot m)
- int est_deterministe (automate a)
- int est_complet (automate a)
- int est_un_etat_final (automate a, int etat)
- int exist_state_in_tab_transi (automate a, int state_touch, int ∗∗∗tab1)
- int Next_one_state_touch (automate a, int state_start, int symbol_apply)
- int calculte_number_states_touch (automate a, int ∗tab_states_touch)
- int start_with_tow (int etat_initial_a, int etat_initial_b)
- int retourne_etat_couant (automate a, int curent_state, int curent_symbol)
- int est_reconnu (mot m, automate a)
- int serie_test_reconnaissance (automate a, int n_fois)
- int reconnu_v2 (mot m, automate a)
- int find_next_state (automate a, mot m)
- int ∗ allocation_tab_1D (int t1)
- int ∗ Next_states_touch (automate a, int start_state, int symbol_apply)
- int ∗ Next_states_touch_not_print (automate a, int start_state, int symbol_apply)
- int ∗ Tab_states_from_q0 (automate a, int symbol_apply)
- int ∗ Tab_states_from_q0_not_print (automate a, int symbol_apply)
- int ∗ group_states_by_same_symbol (automate a, int state_apply, int symbol_fix)

- int * group_states_by_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int ** add_state_to_composite_table (automate a, int **tab, int composite_state, int position)
- int ** copy_line_mat (automate a, int ***mat, int position_line)
- int ** allocation_tab_2D (int t2, int t3)
- int *** allocation_mat_vide (int d1, int d2)
- int *** lecture_automate_court (automate a)
- int *** add_state_to_rename_table_state (automate a, int ***tab_rename, int new_state, int position)
- int *** Tab_transition_automate (automate a)
- int *** Tab_transition_automate_not_print (automate a)
- int *** twos_symbol_apply (automate a, int state_1, int state_2, int symbol_1, int symbol_2)
- automate generate_automate_null (int d1, int d2, int d3)
- automate generate_automate ()
- automate remplir_automate (automate m, int val)
- automate import_automae (char path)
- automate modify_automate (automate a)
- automate save_automate (automate a)
- automate del_automate (automate a)
- automate copie_automate (automate a)
- automate rendre_complet (automate a)
- automate concat (automate a, automate b)
- automate complement_automate (automate a)
- automate rendre_deterministe (automate a)
- automate producte_a_b (automate a, automate b)
- etats_lus lecture_automate_long (automate a)
- mot mot_saisi_avant (automate a)
- mot mot_saisi (automate a)

3.2.1 Function Documentation

3.2.1.1 add_state_to_composite_table()

```
int** add_state_to_composite_table (
            automate a,
            int ** tab,
            int composite_state,
            int position )
```

Parameters

a	
tab	
composite_state	
position	

Returns

int**

3.2.1.2 add_state_to_rename_table_state()

```
int*** add_state_to_rename_table_state (
            automate a,
            int *** tan_rename,
            int new_state,
            int position )
```

Parameters

a	
tan_rename	
new_state	
position	

Returns

int***

3.2.1.3 affichage_1D()

```
void affichage_1D (
            int * tab,
            int dim_tab_1D )
```

Parameters

tab	
dim_tab_1D	

3.2.1.4 affichage_2D()

```
void affichage_2D (
            int ** tab,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.2.1.5 affichage_automate()

```
void affichage_automate (
            automate a )
```

Parameters

a	

3.2.1.6 affichage_case_mat()

```
void affichage_case_mat (
            int *** tab,
            int position_line,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.2.1.7 affichage_case_tab_1D()

```
void affichage_case_tab_1D (
            int * tab,
            int position,
            int dim_tab_1D )
```

Parameters

tab	
position	
dim_tab_1D	

3.2.1.8 affichage_case_tab_2D()

```
void affichage_case_tab_2D (
            int ** tab,
            int position_line,
            int position_col,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.2.1.9 affichage_col_mat()

```
void affichage_col_mat (
            int *** tab,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.2.1.10 affichage_ligne_mat()

```
void affichage_ligne_mat (
            int *** tab,
            int position_line,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	

Parameters

position_line	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.2.1.11 affichage_mot()

```
void affichage_mot (
            mot * mot )
```

Parameters

mot	

3.2.1.12 allocation_mat_vide()

```
int*** allocation_mat_vide (
            int d1,
            int d2 )
```

Parameters

d1	
d2	

Returns

int***

3.2.1.13 allocation_tab_1D()

```
int* allocation_tab_1D (
            int t1 )
```

Parameters

t1	

Returns

int*

3.2.1.14 allocation_tab_2D()

```
int** allocation_tab_2D (
            int t2,
            int t3 )
```

Parameters

t2	
t3	

Returns

int**

3.2.1.15 calculte_number_states_touch()

```
int calculte_number_states_touch (
            automate a,
            int * tab_states_touch )
```

Parameters

a	
tab_states_touch	

Returns

int

3.2.1.16 complement_automate()

```
automate complement_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.17 concat()

```
automate concat (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.2.1.18 copie_automate()

```
automate copie_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.19 copy_line_mat()

```
int** copy_line_mat (
            automate a,
            int *** mat,
            int position_line )
```

Parameters

a	
mat	
position_line	

Returns

int**

3.2.1.20 del_automate()

```
automate del_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.21 echange()

```
void echange (
            int * a,
            int * b )
```

Parameters

a	
b	

3.2.1.22 est_complet()

```
int est_complet (
            automate a )
```

Parameters

a	

Returns

int

3.2.1.23 est_deterministe()

```
int est_deterministe (
            automate a )
```

Parameters

a	

Returns

int

3.2.1.24 est_reconnu()

```
int est_reconnu (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.2.1.25 est_un_etat_final()

```
int est_un_etat_final (
            automate a,
            int etat )
```

Parameters

a	
etat	

Returns

int

3.2.1.26 exist_state_in_tab_transi()

```
int exist_state_in_tab_transi (
            automate a,
            int state_touch,
            int *** tab1 )
```

Parameters

a	
state_touch	
tab1	

Returns

int

3.2.1.27 find_next_state()

```
int find_next_state (
            automate a,
            mot m )
```

Parameters

a	
m	

Returns

int

3.2.1.28 generate_automate()

```
automate generate_automate ( )
```

Returns

automate

3.2.1.29 generate_automate_null()

```
automate generate_automate_null (
            int d1,
            int d2,
            int d3 )
```

Parameters

d1	
d2	
d3	

Returns

automate

3.2.1.30 group_states_by_same_symbol()

```
int* group_states_by_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.2.1.31 group_states_by_same_symbol_not_print()

```
int* group_states_by_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.2.1.32 import_automae()

```
automate import_automae (
            char path )
```

Parameters

path	

Returns

automate

3.2.1.33 lecture_automate_court()

```
int*** lecture_automate_court (
            automate a )
```

Parameters

a	

Returns

int***

3.2.1.34 lecture_automate_long()

```
etats_lus lecture_automate_long (
            automate a )
```

Parameters

a	

Returns

etats_lus

3.2.1.35 lecture_etats_finaux()

```
void lecture_etats_finaux (
            automate a )
```

Parameters

a	

3.2.1.36 lecture_mot()

```
void lecture_mot (
            mot m )
```

Parameters

m	

3.2.1.37 modify_automate()

```
automate modify_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.38 mot_saisi()

```
mot mot_saisi (
            automate a )
```

3.2.1.39 mot_saisi_avant()

```
mot mot_saisi_avant (
            automate a )
```

3.2.1.40 Next_one_state_touch()

```
int Next_one_state_touch (
            automate a,
            int state_start,
            int symbol_apply )
```

Parameters

a	
state_start	
symbol_apply	

Returns

int

3.2.1.41 Next_states_touch()

```
int* Next_states_touch (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.2.1.42 Next_states_touch_not_print()

```
int* Next_states_touch_not_print (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.2.1.43 producte_a_b()

```
automate producte_a_b (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.2.1.44 reconnu_v2()

```
int reconnu_v2 (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.2.1.45 remplir_automate()

```
automate remplir_automate (
            automate m,
            int val )
```

Parameters

m	
val	

Returns

automate

3.2.1.46 rendre_complet()

```
automate rendre_complet (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.47 rendre_deterministe()

```
automate rendre_deterministe (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.48 retourne_etat_couant()

```
int retourne_etat_couant (
            automate a,
            int curent_state,
            int curent_symbol )
```

Parameters

a	
curent_state	
curent_symbol	

Returns

int

3.2.1.49 save_automate()

```
automate save_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.2.1.50 serie_test_reconnaissance()

```
int serie_test_reconnaissance (
            automate a,
            int n_fois )
```

Parameters

a	
n_fois	

Returns

int

3.2.1.51 start_with_tow()

```
int start_with_tow (
            int etat_initial_a,
            int etat_initial_b )
```

Parameters

etat_initial_a	
etat_initial_b	

Returns

int

3.2.1.52 Tab_states_from_q0()

```
int* Tab_states_from_q0 (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.2.1.53 Tab_states_from_q0_not_print()

```
int* Tab_states_from_q0_not_print (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.2.1.54 Tab_transition_automate()

```
int*** Tab_transition_automate (
            automate a )
```

Parameters

a	

Returns

int***

3.2.1.55 Tab_transition_automate_not_print()

```
int*** Tab_transition_automate_not_print (
            automate a )
```

Parameters

a	

Returns

int***

3.2.1.56 twos_symbol_apply()

```
int*** twos_symbol_apply (
            automate a,
            int state_1,
            int state_2,
            int symbol_1,
            int symbol_2 )
```

Parameters

a	
state_1	
state_2	
symbol_1	
symbol_2	

Returns

int***

3.2.1.57 union_states_of_same_symbol()

```
int* union_states_of_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int∗

3.2.1.58 union_states_of_same_symbol_not_print()

```
int* union_states_of_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int∗

3.3 sources/automate.c File Reference

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <math.h>
#include "Automate.h"
#include "main.c"
```

Include dependency graph for automate.c: This graph shows which files directly or indirectly include this file:

Functions

- void affichage_1D (int ∗tab, int dim_tab_1D)
- void affichage_case_tab_1D (int ∗tab, int position, int dim_tab_1D)
- void affichage_2D (int ∗∗tab, int dim_tab_2D_ligne, int dim_tab_2D_col)
- void affichage_case_tab_2D (int ∗∗tab, int position_line, int position_col, int dim_tab_2D_ligne, int dim_tab↩ _2D_col)
- void affichage_ligne_mat (int ∗∗∗tab, int position_line, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_col_mat (int ∗∗∗tab, int position_col, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_case_mat (int ∗∗∗tab, int position_line, int position_col, int dim_tab_3D_ligne, int dim_tab_↩ 3D_col)
- void affichage_automate (automate a)
- void lecture_etats_finaux (automate a)
- void echange (int ∗a, int ∗b)
- void affichage_mot (mot ∗mot)
- void lecture_mot (mot m)
- int est_deterministe (automate a)

- int est_complet (automate a)
- int est_un_etat_final (automate a, int etat)
- int exist_state_in_tab_transi (automate a, int state_touch, int ∗∗∗tab1)
- int Next_one_state_touch (automate a, int state_start, int symbol_apply)
- int calculte_number_states_touch (automate a, int ∗tab_states_touch)
- int start_with_tow (int etat_initial_a, int etat_initial_b)
- int retourne_etat_couant (automate a, int curent_state, int curent_symbol)
- int est_reconnu (mot m, automate a)
- int serie_test_reconnaissance (automate a, int n_fois)
- int reconnu_v2 (mot m, automate a)
- int find_next_state (automate a, mot m)
- int ∗ allocation_tab_1D (int t1)
- int ∗ Next_states_touch (automate a, int start_state, int symbol_apply)
- int ∗ Next_states_touch_not_print (automate a, int start_state, int symbol_apply)
- int ∗ Tab_states_from_q0 (automate a, int symbol_apply)
- int ∗ Tab_states_from_q0_not_print (automate a, int symbol_apply)
- int ∗ group_states_by_same_symbol (automate a, int state_apply, int symbol_fix)
- int ∗ group_states_by_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int ∗ union_states_of_same_symbol (automate a, int state_apply, int symbol_fix)
- int ∗ union_states_of_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int ∗∗ add_state_to_composite_table (automate a, int ∗∗tab, int composite_state, int position)
- int ∗∗ copy_line_mat (automate a, int ∗∗∗mat, int position_line)
- int ∗∗ allocation_tab_2D (int t2, int t3)
- int ∗∗∗ allocation_mat_vide (int d1, int d2)
- int ∗∗∗ lecture_automate_court (automate a)
- int ∗∗∗ add_state_to_rename_table_state (automate a, int ∗∗∗tab_rename, int new_state, int position)
- int ∗∗∗ Tab_transition_automate (automate a)
- int ∗∗∗ Tab_transition_automate_not_print (automate a)
- int ∗∗∗ twos_symbol_apply (automate a, int state_1, int state_2, int symbol_1, int symbol_2)
- automate generate_automate_null (int d1, int d2, int d3)
- automate generate_automate ()
- automate remplir_automate (automate m, int val)
- automate import_automae (char path)
- automate modify_automate (automate a)
- automate save_automate (automate a)
- automate del_automate (automate a)
- automate copie_automate (automate a)
- automate rendre_complet (automate a)
- automate concat (automate a, automate b)
- automate complement_automate (automate a)
- automate rendre_deterministe (automate a)
- automate producte_a_b (automate a, automate b)
- etats_lus lecture_automate_long (automate a)
- mot mot_saisi_avant (automate a)
- mot mot_saisi (automate a)

3.3.1 Detailed Description

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Version

0.1

Date

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Copyright

3.3.2 Function Documentation

3.3.2.1 add_state_to_composite_table()

```
int** add_state_to_composite_table (
            automate a,
            int ** tab,
            int composite_state,
            int position )
```

Parameters

a	
tab	
composite_state	
position	

Returns

int**

3.3.2.2 add_state_to_rename_table_state()

```
int*** add_state_to_rename_table_state (
            automate a,
            int *** tab_rename,
            int new_state,
            int position )
```

Parameters

a	
tab_rename	
new_state	
position	

Returns

int***

3.3.2.3 affichage_1D()

```
void affichage_1D (
            int * tab,
            int dim_tab_1D )
```

Parameters

tab	
dim_tab_1D	

3.3.2.4 affichage_2D()

```
void affichage_2D (
            int ** tab,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.3.2.5 affichage_automate()

```
void affichage_automate (
            automate a )
```

Parameters

a	

3.3.2.6 affichage_case_mat()

```
void affichage_case_mat (
```

```
            int *** tab,
            int position_line,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.3.2.7 affichage_case_tab_1D()

```
void affichage_case_tab_1D (
            int * tab,
            int position,
            int dim_tab_1D )
```

Parameters

tab	
position	
dim_tab_1D	

3.3.2.8 affichage_case_tab_2D()

```
void affichage_case_tab_2D (
            int ** tab,
            int position_line,
            int position_col,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.3.2.9 affichage_col_mat()

```
void affichage_col_mat (
            int *** tab,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.3.2.10 affichage_ligne_mat()

```
void affichage_ligne_mat (
            int *** tab,
            int position_line,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.3.2.11 affichage_mot()

```
void affichage_mot (
            mot * mot )
```

Parameters

mot	

3.3.2.12 allocation_mat_vide()

```
int*** allocation_mat_vide (
```

```
            int d1,
            int d2 )
```

Parameters

d1	
d2	

Returns

int***

3.3.2.13 allocation_tab_1D()

```
int* allocation_tab_1D (
            int t1 )
```

Parameters

t1	

Returns

int*

3.3.2.14 allocation_tab_2D()

```
int** allocation_tab_2D (
            int t2,
            int t3 )
```

Parameters

t2	
t3	

Returns

int**

3.3.2.15 calculte_number_states_touch()

```
int calculte_number_states_touch (
            automate a,
            int * tab_states_touch )
```

Parameters

a	
tab_states_touch	

Returns

int

3.3.2.16 complement_automate()

```
automate complement_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.17 concat()

```
automate concat (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.3.2.18 copie_automate()

```
automate copie_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.19 copy_line_mat()

```
int** copy_line_mat (
            automate a,
            int *** mat,
            int position_line )
```

Parameters

a	
mat	
position_line	

Returns

int**

3.3.2.20 del_automate()

```
automate del_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.21 echange()

```
void echange (
            int * a,
            int * b )
```

Parameters

a	
b	

3.3.2.22 est_complet()

```
int est_complet (
            automate a )
```

Parameters

a	

Returns

int

3.3.2.23 est_deterministe()

```
int est_deterministe (
            automate a )
```

Parameters

a	

Returns

int

3.3.2.24 est_reconnu()

```
int est_reconnu (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.3.2.25 est_un_etat_final()

```
int est_un_etat_final (
            automate a,
            int etat )
```

Parameters

a	
etat	

Returns

int

3.3.2.26 exist_state_in_tab_transi()

```
int exist_state_in_tab_transi (
            automate a,
            int state_touch,
            int *** tab1 )
```

Parameters

a	
state_touch	
tab1	

Returns

int

3.3.2.27 find_next_state()

```
int find_next_state (
            automate a,
            mot m )
```

Parameters

a	
m	

Returns

int

3.3.2.28 generate_automate()

```
automate generate_automate ( )
```

Returns

automate

3.3.2.29 generate_automate_null()

```
automate generate_automate_null (
            int d1,
            int d2,
            int d3 )
```

Parameters

d1	
d2	
d3	

Returns

automate

3.3.2.30 group_states_by_same_symbol()

```
int* group_states_by_same_symbol (
            automate a,
```

```
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.3.2.31 group_states_by_same_symbol_not_print()

```
int* group_states_by_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.3.2.32 import_automae()

```
automate import_automae (
            char path )
```

Parameters

path	

Returns

automate

3.3.2.33 lecture_automate_court()

```
int*** lecture_automate_court (
            automate a )
```

Parameters

a	

Returns

int***

3.3.2.34 lecture_automate_long()

```
etats_lus lecture_automate_long (
            automate a )
```

Parameters

a	

Returns

etats_lus

3.3.2.35 lecture_etats_finaux()

```
void lecture_etats_finaux (
            automate a )
```

Parameters

a	

3.3.2.36 lecture_mot()

```
void lecture_mot (
            mot m )
```

Parameters

m	

3.3.2.37 modify_automate()

```
automate modify_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.38 mot_saisi()

```
mot mot_saisi (
            automate a )
```

Parameters

a	

Returns

mot

3.3.2.39 mot_saisi_avant()

```
mot mot_saisi_avant (
            automate a )
```

Parameters

a	

Returns

mot

3.3.2.40 Next_one_state_touch()

```
int Next_one_state_touch (
            automate a,
            int state_start,
            int symbol_apply )
```

Parameters

a	
state_start	
symbol_apply	

Returns

int

3.3.2.41 Next_states_touch()

```
int* Next_states_touch (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.3.2.42 Next_states_touch_not_print()

```
int* Next_states_touch_not_print (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int∗

3.3.2.43 producte_a_b()

```
automate producte_a_b (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.3.2.44 reconnu_v2()

```
int reconnu_v2 (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.3.2.45 remplir_automate()

```
automate remplir_automate (
            automate m,
            int val )
```

Parameters

m	
val	

Returns

automate

3.3.2.46 rendre_complet()

```
automate rendre_complet (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.47 rendre_deterministe()

```
automate rendre_deterministe (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.48 retourne_etat_couant()

```
int retourne_etat_couant (
            automate a,
            int curent_state,
            int curent_symbol )
```

Parameters

a	
curent_state	
curent_symbol	

Returns

int

3.3.2.49 save_automate()

```
automate save_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.3.2.50 serie_test_reconnaissance()

```
int serie_test_reconnaissance (
            automate a,
            int n_fois )
```

Parameters

a	
n_fois	

Returns

int

3.3.2.51 start_with_tow()

```
int start_with_tow (
            int etat_initial_a,
            int etat_initial_b )
```

Parameters

etat_initial_a	
etat_initial_b	

Returns

int

3.3.2.52 Tab_states_from_q0()

```
int* Tab_states_from_q0 (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.3.2.53 Tab_states_from_q0_not_print()

```
int* Tab_states_from_q0_not_print (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.3.2.54 Tab_transition_automate()

```
int*** Tab_transition_automate (
            automate a )
```

Parameters

a	

Returns

int***

3.3.2.55 Tab_transition_automate_not_print()

```
int*** Tab_transition_automate_not_print (
            automate a )
```

Parameters

a	

Returns

int***

3.3.2.56 twos_symbol_apply()

```
int*** twos_symbol_apply (
            automate a,
            int state_1,
            int state_2,
            int symbol_1,
            int symbol_2 )
```

Parameters

a	
state_1	

Parameters

state_2	
symbol↩ _1	
symbol↩ _2	

Returns

int***

3.3.2.57 union_states_of_same_symbol()

```
int* union_states_of_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.3.2.58 union_states_of_same_symbol_not_print()

```
int* union_states_of_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int∗

3.4 Contribution au projet/sources/Automate.h File Reference

```
#include "automate.c"
#include "main.c"
```
Include dependency graph for Automate.h:

3.5 Projet_C/sources/Automate.h File Reference

```
#include "automate.c"
#include "main.c"
```
Include dependency graph for Automate.h: This graph shows which files directly or indirectly include this file:

Data Structures

- struct automate
- struct table_de_lecture_automate
- struct mot

Typedefs

- typedef struct automate automate
- typedef struct table_de_lecture_automate etats_lus
- typedef struct mot mot

Functions

- void affichage_1D (int ∗tab, int dim_tab_1D)
- void affichage_case_tab_1D (int ∗tab, int position, int dim_tab_1D)
- void affichage_2D (int ∗∗tab, int dim_tab_2D_ligne, int dim_tab_2D_col)
- void affichage_case_tab_2D (int ∗∗tab, int position_line, int position_col, int dim_tab_2D_ligne, int dim_tab↩ _2D_col)
- void affichage_ligne_mat (int ∗∗∗tab, int position_line, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_col_mat (int ∗∗∗tab, int position_col, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_case_mat (int ∗∗∗tab, int position_line, int position_col, int dim_tab_3D_ligne, int dim_tab_↩ 3D_col)
- void affichage_automate (automate a)
- void lecture_etats_finaux (automate a)
- void echange (int ∗a, int ∗b)
- void affichage_mot (mot ∗mot)
- void lecture_mot (mot m)
- int est_deterministe (automate a)
- int est_complet (automate a)
- int est_un_etat_final (automate a, int etat)
- int exist_state_in_tab_transi (automate a, int state_touch, int ∗∗∗tab1)

- int Next_one_state_touch (automate a, int state_start, int symbol_apply)
- int calculte_number_states_touch (automate a, int *tab_states_touch)
- int start_with_tow (int etat_initial_a, int etat_initial_b)
- int retourne_etat_couant (automate a, int curent_state, int curent_symbol)
- int est_reconnu (mot m, automate a)
- int serie_test_reconnaissance (automate a, int n_fois)
- int reconnu_v2 (mot m, automate a)
- int find_next_state (automate a, mot m)
- int * allocation_tab_1D (int t1)
- int * Next_states_touch (automate a, int start_state, int symbol_apply)
- int * Next_states_touch_not_print (automate a, int start_state, int symbol_apply)
- int * Tab_states_from_q0 (automate a, int symbol_apply)
- int * Tab_states_from_q0_not_print (automate a, int symbol_apply)
- int * group_states_by_same_symbol (automate a, int state_apply, int symbol_fix)
- int * group_states_by_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int ** add_state_to_composite_table (automate a, int **tab, int composite_state, int position)
- int ** copy_line_mat (automate a, int ***mat, int position_line)
- int ** allocation_tab_2D (int t2, int t3)
- int *** allocation_mat_vide (int d1, int d2)
- int *** lecture_automate_court (automate a)
- int *** add_state_to_rename_table_state (automate a, int ***tan_rename, int new_state, int position)
- int *** Tab_transition_automate (automate a)
- int *** Tab_transition_automate_not_print (automate a)
- int *** twos_symbol_apply (automate a, int state_1, int state_2, int symbol_1, int symbol_2)
- automate generate_automate_null (int d1, int d2, int d3)
- automate generate_automate ()
- automate remplir_automate (automate m, int val)
- automate import_automae (char path)
- automate modify_automate (automate a)
- automate save_automate (automate a)
- automate del_automate (automate a)
- automate copie_automate (automate a)
- automate rendre_complet (automate a)
- automate concat (automate a, automate b)
- automate complement_automate (automate a)
- automate rendre_deterministe (automate a)
- automate producte_a_b (automate a, automate b)
- etats_lus lecture_automate_long (automate a)

3.5.1 Data Structure Documentation

3.5.1.1 struct automate

Data Fields

int	etat_initial	
int *	Etats_finaux	
int ***	matrice	
int	nb_Etats	
int	nb_Etats_finaux	
int	nb_Symboles	
int ***	Table_transition	

3.5.1.2 struct table_de_lecture_automate

Data Fields

int ***	etat_lu_depart	
int ***	etats_lus_finaux	
int ***	etats_lus_intermediaires	

3.5.1.3 struct mot

Data Fields

int	size_mot	
int *	Tab_caract	

3.5.2 Typedef Documentation

3.5.2.1 automate

```
typedef struct automate automate
```

3.5.2.2 etats_lus

```
typedef struct table_de_lecture_automate etats_lus
```

3.5.2.3 mot

```
typedef struct mot mot
```

3.5.3 Function Documentation

3.5.3.1 add_state_to_composite_table()

```
int** add_state_to_composite_table (
            automate a,
            int ** tab,
            int composite_state,
            int position )
```

Parameters

a	
tab	
composite_state	
position	

Returns

int**

3.5.3.2 add_state_to_rename_table_state()

```
int*** add_state_to_rename_table_state (
            automate a,
            int *** tab_rename,
            int new_state,
            int position )
```

Parameters

a	
tab_rename	
new_state	
position	

Returns

int***

3.5.3.3 affichage_1D()

```
void affichage_1D (
            int * tab,
            int dim_tab_1D )
```

Parameters

tab	
dim_tab_1D	

3.5.3.4 affichage_2D()

```
void affichage_2D (
            int ** tab,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.5.3.5 affichage_automate()

```
void affichage_automate (
            automate a )
```

Parameters

a	

3.5.3.6 affichage_case_mat()

```
void affichage_case_mat (
            int *** tab,
            int position_line,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.5.3.7 affichage_case_tab_1D()

```
void affichage_case_tab_1D (
            int * tab,
```

```
            int position,
            int dim_tab_1D )
```

Parameters

tab	
position	
dim_tab_1D	

3.5.3.8 affichage_case_tab_2D()

```
void affichage_case_tab_2D (
            int ** tab,
            int position_line,
            int position_col,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.5.3.9 affichage_col_mat()

```
void affichage_col_mat (
            int *** tab,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.5.3.10 affichage_ligne_mat()

```
void affichage_ligne_mat (
            int *** tab,
            int position_line,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.5.3.11 affichage_mot()

```
void affichage_mot (
            mot * mot )
```

Parameters

mot	

3.5.3.12 allocation_mat_vide()

```
int*** allocation_mat_vide (
            int d1,
            int d2 )
```

Parameters

d1	
d2	

Returns

int***

3.5.3.13 allocation_tab_1D()

```
int* allocation_tab_1D (
            int t1 )
```

Parameters

t1	

Returns

int*

3.5.3.14 allocation_tab_2D()

```
int** allocation_tab_2D (
            int t2,
            int t3 )
```

Parameters

t2	
t3	

Returns

int**

3.5.3.15 calculte_number_states_touch()

```
int calculte_number_states_touch (
            automate a,
            int * tab_states_touch )
```

Parameters

a	
tab_states_touch	

Returns

int

3.5.3.16 complement_automate()

```
automate complement_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.17 concat()

```
automate concat (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.5.3.18 copie_automate()

```
automate copie_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.19 copy_line_mat()

```
int** copy_line_mat (
            automate a,
            int *** mat,
            int position_line )
```

Parameters

a	
mat	
position_line	

Returns

int**

3.5.3.20 del_automate()

```
automate del_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.21 echange()

```
void echange (
            int * a,
            int * b )
```

Parameters

a	
b	

3.5.3.22 est_complet()

```
int est_complet (
            automate a )
```

Parameters

a	

Returns

int

3.5.3.23 est_deterministe()

```
int est_deterministe (
            automate a )
```

Parameters

a	

Returns

int

3.5.3.24 est_reconnu()

```
int est_reconnu (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.5.3.25 est_un_etat_final()

```
int est_un_etat_final (
            automate a,
            int etat )
```

Parameters

a	
etat	

Returns

int

3.5.3.26 exist_state_in_tab_transi()

```
int exist_state_in_tab_transi (
            automate a,
            int state_touch,
            int *** tab1 )
```

Parameters

a	
state_touch	
tab1	

Returns

int

3.5.3.27 find_next_state()

```
int find_next_state (
            automate a,
            mot m )
```

Parameters

a	
m	

Returns

int

3.5.3.28 generate_automate()

```
automate generate_automate ( )
```

Returns

automate

3.5.3.29 generate_automate_null()

```
automate generate_automate_null (
            int d1,
            int d2,
            int d3 )
```

Parameters

d1	
d2	
d3	

Returns

automate

3.5.3.30 group_states_by_same_symbol()

```
int* group_states_by_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.5.3.31 group_states_by_same_symbol_not_print()

```
int* group_states_by_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.5.3.32 import_automae()

```
automate import_automae (
            char path )
```

Parameters

path	

Returns

automate

3.5.3.33 lecture_automate_court()

```
int*** lecture_automate_court (
            automate a )
```

Parameters

a	

Returns

int***

3.5.3.34 lecture_automate_long()

```
etats_lus lecture_automate_long (
            automate a )
```

Parameters

a	

Returns

etats_lus

3.5.3.35 lecture_etats_finaux()

```
void lecture_etats_finaux (
            automate a )
```

Parameters

a	

3.5.3.36 lecture_mot()

```
void lecture_mot (
            mot m )
```

Parameters

m	

3.5.3.37 modify_automate()

```
automate modify_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.38 Next_one_state_touch()

```
int Next_one_state_touch (
            automate a,
            int state_start,
            int symbol_apply )
```

Parameters

a	
state_start	
symbol_apply	

Returns

int

3.5.3.39 Next_states_touch()

```
int* Next_states_touch (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.5.3.40 Next_states_touch_not_print()

```
int* Next_states_touch_not_print (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.5.3.41 producte_a_b()

```
automate producte_a_b (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.5.3.42 reconnu_v2()

```
int reconnu_v2 (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.5.3.43 remplir_automate()

```
automate remplir_automate (
            automate m,
            int val )
```

Parameters

m	
val	

Returns

automate

3.5.3.44 rendre_complet()

```
automate rendre_complet (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.45 rendre_deterministe()

```
automate rendre_deterministe (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.46 retourne_etat_couant()

```
int retourne_etat_couant (
            automate a,
            int curent_state,
            int curent_symbol )
```

Parameters

a	
curent_state	
curent_symbol	

Returns

int

3.5.3.47 save_automate()

```
automate save_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.5.3.48 serie_test_reconnaissance()

```
int serie_test_reconnaissance (
            automate a,
            int n_fois )
```

Parameters

a	
n_fois	

Returns

int

3.5.3.49 start_with_tow()

```
int start_with_tow (
            int etat_initial_a,
            int etat_initial_b )
```

Parameters

etat_initial_a	
etat_initial_b	

Returns

int

3.5.3.50 Tab_states_from_q0()

```
int* Tab_states_from_q0 (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.5.3.51 Tab_states_from_q0_not_print()

```
int* Tab_states_from_q0_not_print (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.5.3.52 Tab_transition_automate()

```
int*** Tab_transition_automate (
            automate a )
```

Parameters

a	

Returns

int***

3.5.3.53 Tab_transition_automate_not_print()

```
int*** Tab_transition_automate_not_print (
            automate a )
```

Parameters

a	

Returns

int***

3.5.3.54 twos_symbol_apply()

```
int*** twos_symbol_apply (
            automate a,
            int state_1,
            int state_2,
            int symbol_1,
            int symbol_2 )
```

Parameters

a	
state_1	
state_2	
symbol_1	
symbol_2	

Returns

int***

3.5.3.55 union_states_of_same_symbol()

```
int* union_states_of_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int∗

3.5.3.56 union_states_of_same_symbol_not_print()

```
int* union_states_of_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int∗

3.6 sources/Automate.h File Reference

```
#include "automate.c"
#include "main.c"
```

Include dependency graph for Automate.h: This graph shows which files directly or indirectly include this file:

Data Structures

- struct automate
- struct table_de_lecture_automate
- struct mot

Typedefs

- typedef struct automate automate
- typedef struct table_de_lecture_automate etats_lus
- typedef struct mot mot

Functions

- void affichage_1D (int *tab, int dim_tab_1D)
- void affichage_case_tab_1D (int *tab, int position, int dim_tab_1D)
- void affichage_2D (int **tab, int dim_tab_2D_ligne, int dim_tab_2D_col)
- void affichage_case_tab_2D (int **tab, int position_line, int position_col, int dim_tab_2D_ligne, int dim_tab↩ _2D_col)
- void affichage_ligne_mat (int ***tab, int position_line, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_col_mat (int ***tab, int position_col, int dim_tab_3D_ligne, int dim_tab_3D_col)
- void affichage_case_mat (int ***tab, int position_line, int position_col, int dim_tab_3D_ligne, int dim_tab_↩ 3D_col)
- void affichage_automate (automate a)
- void lecture_etats_finaux (automate a)
- void echange (int *a, int *b)
- void affichage_mot (mot *mot)
- void lecture_mot (mot m)
- int est_deterministe (automate a)
- int est_complet (automate a)
- int est_un_etat_final (automate a, int etat)
- int exist_state_in_tab_transi (automate a, int state_touch, int ***tab1)
- int Next_one_state_touch (automate a, int state_start, int symbol_apply)
- int calculte_number_states_touch (automate a, int *tab_states_touch)
- int start_with_tow (int etat_initial_a, int etat_initial_b)
- int retourne_etat_couant (automate a, int curent_state, int curent_symbol)
- int est_reconnu (mot m, automate a)
- int serie_test_reconnaissance (automate a, int n_fois)
- int reconnu_v2 (mot m, automate a)
- int find_next_state (automate a, mot m)
- int * allocation_tab_1D (int t1)
- int * Next_states_touch (automate a, int start_state, int symbol_apply)
- int * Next_states_touch_not_print (automate a, int start_state, int symbol_apply)
- int * Tab_states_from_q0 (automate a, int symbol_apply)
- int * Tab_states_from_q0_not_print (automate a, int symbol_apply)
- int * group_states_by_same_symbol (automate a, int state_apply, int symbol_fix)
- int * group_states_by_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol (automate a, int state_apply, int symbol_fix)
- int * union_states_of_same_symbol_not_print (automate a, int state_apply, int symbol_fix)
- int ** add_state_to_composite_table (automate a, int **tab, int composite_state, int position)
- int ** copy_line_mat (automate a, int ***mat, int position_line)
- int ** allocation_tab_2D (int t2, int t3)
- int *** allocation_mat_vide (int d1, int d2)
- int *** lecture_automate_court (automate a)
- int *** add_state_to_rename_table_state (automate a, int ***tan_rename, int new_state, int position)
- int *** Tab_transition_automate (automate a)
- int *** Tab_transition_automate_not_print (automate a)
- int *** twos_symbol_apply (automate a, int state_1, int state_2, int symbol_1, int symbol_2)
- automate generate_automate_null (int d1, int d2, int d3)
- automate generate_automate ()
- automate remplir_automate (automate m, int val)
- automate import_automae (char path)
- automate modify_automate (automate a)
- automate save_automate (automate a)
- automate del_automate (automate a)
- automate copie_automate (automate a)
- automate rendre_complet (automate a)

- automate concat (automate a, automate b)
- automate complement_automate (automate a)
- automate rendre_deterministe (automate a)
- automate producte_a_b (automate a, automate b)
- etats_lus lecture_automate_long (automate a)

3.6.1 Detailed Description

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3.6.2 Data Structure Documentation

3.6.2.1 struct automate

Data Fields

int	etat_initial	
int *	Etats_finaux	
int ***	matrice	
int	nb_Etats	
int	nb_Etats_finaux	
int	nb_Symboles	
int ***	Table_transition	

3.6.2.2 struct table_de_lecture_automate

Data Fields

int ***	etat_lu_depart	
int ***	etats_lus_finaux	
int ***	etats_lus_intermediaires	

3.6.2.3 struct mot

Data Fields

int	size_mot	
int *	Tab_caract	

3.6.3 Typedef Documentation

3.6.3.1 automate

```
typedef struct automate automate
```

3.6.3.2 etats_lus

```
typedef struct table_de_lecture_automate etats_lus
```

3.6.3.3 mot

```
typedef struct mot mot
```

3.6.4 Function Documentation

3.6.4.1 add_state_to_composite_table()

```
int** add_state_to_composite_table (
            automate a,
            int ** tab,
            int composite_state,
            int position )
```

Parameters

a	
tab	
composite_state	
position	

Returns

int**

3.6.4.2 add_state_to_rename_table_state()

```
int*** add_state_to_rename_table_state (
            automate a,
            int *** tab_rename,
            int new_state,
            int position )
```

Parameters

a	
tan_rename	
new_state	
position	

Returns

int***

Parameters

a	
tab_rename	
new_state	
position	

Returns

int***

3.6.4.3 affichage_1D()

```
void affichage_1D (
            int * tab,
            int dim_tab_1D )
```

Parameters

tab	
dim_tab_1D	

3.6.4.4 affichage_2D()

```
void affichage_2D (
            int ** tab,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.6.4.5 affichage_automate()

```
void affichage_automate (
            automate a )
```

Parameters

a	

3.6.4.6 affichage_case_mat()

```
void affichage_case_mat (
            int *** tab,
            int position_line,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.6.4.7 affichage_case_tab_1D()

```
void affichage_case_tab_1D (
            int * tab,
            int position,
            int dim_tab_1D )
```

Parameters

tab	
position	
dim_tab_1D	

3.6.4.8 affichage_case_tab_2D()

```
void affichage_case_tab_2D (
            int ** tab,
            int position_line,
            int position_col,
            int dim_tab_2D_ligne,
            int dim_tab_2D_col )
```

Parameters

tab	
position_line	
position_col	
dim_tab_2D_ligne	
dim_tab_2D_col	

3.6.4.9 affichage_col_mat()

```
void affichage_col_mat (
            int *** tab,
            int position_col,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_col	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.6.4.10 affichage_ligne_mat()

```
void affichage_ligne_mat (
            int *** tab,
            int position_line,
            int dim_tab_3D_ligne,
            int dim_tab_3D_col )
```

Parameters

tab	
position_line	
dim_tab_3D_ligne	
dim_tab_3D_col	

3.6.4.11 affichage_mot()

```
void affichage_mot (
            mot * mot )
```

Parameters

mot	

3.6.4.12 allocation_mat_vide()

```
int*** allocation_mat_vide (
            int d1,
            int d2 )
```

Parameters

d1	
d2	

Returns

int***

3.6.4.13 allocation_tab_1D()

```
int* allocation_tab_1D (
            int t1 )
```

Parameters

t1	

Returns

int*

3.6.4.14 allocation_tab_2D()

```
int** allocation_tab_2D (
            int t2,
            int t3 )
```

Parameters

t2	
t3	

Returns

int**

3.6.4.15 calculte_number_states_touch()

```
int calculte_number_states_touch (
            automate a,
            int * tab_states_touch )
```

Parameters

a	
tab_states_touch	

Returns

int

3.6.4.16 complement_automate()

```
automate complement_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.17 concat()

```
automate concat (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.6.4.18 copie_automate()

```
automate copie_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.19 copy_line_mat()

```
int** copy_line_mat (
            automate a,
            int *** mat,
            int position_line )
```

Parameters

a	
mat	
position_line	

Returns

int**

3.6.4.20 del_automate()

```
automate del_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.21 echange()

```
void echange (
            int * a,
            int * b )
```

Parameters

a	
b	

3.6.4.22 est_complet()

```
int est_complet (
            automate a )
```

Parameters

a	

Returns

int

3.6.4.23 est_deterministe()

```
int est_deterministe (
            automate a )
```

Parameters

a	

Returns

int

3.6.4.24 est_reconnu()

```
int est_reconnu (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.6.4.25 est_un_etat_final()

```
int est_un_etat_final (
            automate a,
            int etat )
```

Parameters

a	
etat	

Returns

int

3.6.4.26 exist_state_in_tab_transi()

```
int exist_state_in_tab_transi (
            automate a,
            int state_touch,
            int *** tab1 )
```

Parameters

a	
state_touch	
tab1	

Returns

int

3.6.4.27 find_next_state()

```
int find_next_state (
            automate a,
            mot m )
```

Parameters

a	
m	

Returns

int

3.6.4.28 generate_automate()

```
automate generate_automate ( )
```

Returns

automate

3.6.4.29 generate_automate_null()

```
automate generate_automate_null (
            int d1,
            int d2,
            int d3 )
```

Parameters

d1	
d2	
d3	

Returns

automate

3.6.4.30 group_states_by_same_symbol()

```
int* group_states_by_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.6.4.31 group_states_by_same_symbol_not_print()

```
int* group_states_by_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.6.4.32 import_automae()

```
automate import_automae (
            char path )
```

Parameters

path	

Returns

automate

3.6.4.33 lecture_automate_court()

```
int*** lecture_automate_court (
            automate a )
```

Parameters

a	

Returns

int***

3.6.4.34 lecture_automate_long()

```
etats_lus lecture_automate_long (
            automate a )
```

Parameters

a	

Returns

etats_lus

3.6.4.35 lecture_etats_finaux()

```
void lecture_etats_finaux (
            automate a )
```

Parameters

a	

3.6.4.36 lecture_mot()

```
void lecture_mot (
            mot m )
```

Parameters

m	

3.6.4.37 modify_automate()

```
automate modify_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.38 Next_one_state_touch()

```
int Next_one_state_touch (
            automate a,
            int state_start,
            int symbol_apply )
```

Parameters

a	
state_start	
symbol_apply	

Returns

int

3.6.4.39 Next_states_touch()

```
int* Next_states_touch (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.6.4.40 Next_states_touch_not_print()

```
int* Next_states_touch_not_print (
            automate a,
            int start_state,
            int symbol_apply )
```

Parameters

a	
start_state	
symbol_apply	

Returns

int*

3.6.4.41 producte_a_b()

```
automate producte_a_b (
            automate a,
            automate b )
```

Parameters

a	
b	

Returns

automate

3.6.4.42 reconnu_v2()

```
int reconnu_v2 (
            mot m,
            automate a )
```

Parameters

m	
a	

Returns

int

3.6.4.43 remplir_automate()

```
automate remplir_automate (
            automate m,
            int val )
```

Parameters

m	
val	

Returns

automate

3.6.4.44 rendre_complet()

```
automate rendre_complet (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.45 rendre_deterministe()

```
automate rendre_deterministe (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.46 retourne_etat_couant()

```
int retourne_etat_couant (
            automate a,
            int curent_state,
            int curent_symbol )
```

Parameters

a	
curent_state	
curent_symbol	

Returns

int

3.6.4.47 save_automate()

```
automate save_automate (
            automate a )
```

Parameters

a	

Returns

automate

3.6.4.48 serie_test_reconnaissance()

```
int serie_test_reconnaissance (
            automate a,
            int n_fois )
```

Parameters

a	
n_fois	

Returns

int

3.6.4.49 start_with_tow()

```
int start_with_tow (
            int etat_initial_a,
            int etat_initial_b )
```

Parameters

etat_initial_a	
etat_initial_b	

Returns

int

3.6.4.50 Tab_states_from_q0()

```
int* Tab_states_from_q0 (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.6.4.51 Tab_states_from_q0_not_print()

```
int* Tab_states_from_q0_not_print (
            automate a,
            int symbol_apply )
```

Parameters

a	
symbol_apply	

Returns

int*

3.6.4.52 Tab_transition_automate()

```
int*** Tab_transition_automate (
            automate a )
```

Parameters

a	

Returns

int***

3.6.4.53 Tab_transition_automate_not_print()

```
int*** Tab_transition_automate_not_print (
            automate a )
```

Parameters

a	

Returns

int***

3.6.4.54 twos_symbol_apply()

```
int*** twos_symbol_apply (
            automate a,
            int state_1,
            int state_2,
            int symbol_1,
            int symbol_2 )
```

Parameters

a	
state_1	
state_2	
symbol_1	
symbol_2	

Returns

int***

3.6.4.55 union_states_of_same_symbol()

```
int* union_states_of_same_symbol (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.6.4.56 union_states_of_same_symbol_not_print()

```
int* union_states_of_same_symbol_not_print (
            automate a,
            int state_apply,
            int symbol_fix )
```

Parameters

a	
state_apply	
symbol_fix	

Returns

int*

3.7 Projet_C/sources/main.c File Reference

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <math.h>
#include "Automate.h"
```

Include dependency graph for main.c: This graph shows which files directly or indirectly include this file:

Functions

- int main ()

3.7.1 Function Documentation

3.7.1.1 main()

```
int main ( )
```

Returns

3.8 sources/main.c File Reference

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <math.h>
#include "Automate.h"
```

Include dependency graph for main.c: This graph shows which files directly or indirectly include this file:

Functions

- int main ()

3.8.1 Function Documentation

3.8.1.1 main()

```
int main ( )
```

Returns

3.9 README.md File Reference

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