#	STATE	Events	NEXT STATE	DESCRIPTION
1	START_IDLE_STATE	person.event = ls | rs doorScanState	FIRST_DOOR_SCAN_STATE	Both start and idle state Reset every data in the display and person object
2	DOOR_SCAN_STATE	person.event = glu | gru guardFirstDoorUnlockState	GUARD_FIRST_DOOR_UNLOCK_STATE	Takes care of both left scan and right scan
3	GUARD_FIRST_DOOR_UNLOCK_STATE	person.event = lo | ro firstDoorOpenState	FIRST_DOOR_OPEN STATE	Takes care of the first guard unlock left or guard unlock right
4	FIRST_DOOR_OPEN_STATE	person.event = ws weightScanState	WEIGHT_SCAN_STATE	Takes care of the first right open or left open
5	WEIGHT_SCAN_STATE	person.event = lc | rc firstDoorCloseState	FIRST_DOOR_CLOSE STATE	Takes care of weight scan
6	FIRST_DOOR_CLOSE_STATE	person.event = gll | grl guardFirstDoorLockState	GUARD_FIRST_DOOR LOCK_STATE	Takes care of the first left close or right close
7	GUARD_FIRST_DOOR_LOCK_STATE	person.event = grl | glu guardSecondDoorUnlockState	GUARD_SECOND_DOOR_UNLOCK_STATE	Takes care of the first guard left lock or guard right lock
8	GUARD_SECOND_DOOR_UNLOCK_STATE	person.event = ro | lo secondDoorOpenState	SECOND_DOOR_OPEN_STATE	Takes care of the 2nd guard right unlock or guard left unlock
9	SECOND_DOOR_OPEN_STATE	person.event = rc | lc secondDoorCloseState	SECOND_DOOR_CLOSE_STATE	Takes care of the 2nd right open or left open
10	SECOND_DOOR_CLOSE_STATE	person.event = grl | gll guardSecondDoorLockState	GUARD_SECOND_DOOR_LOCK_STATE	Takes care of the 2nd right close or left close
11	GUARD_SECOND_DOOR_LOCK_STATE	requires no input	START_IDLE_STATE	Takes care of the 2nd guard right lock or guard left lock
12	Any State	Person.event = exit	EXIT_STATE	Program ends

#	STATE
1	START_IDLE_STATE
2	DOOR_SCAN_STATE
3	GUARD_FIRST_DOOR_UNLOCK_STATE
4	FIRST_DOOR_OPEN_STATE
5	WEIGHT_SCAN_STATE
6	FIRST_DOOR_CLOSE_STATE
7	GUARD_FIRST_DOOR_LOCK_STATE
8	GUARD_SECOND_DOOR_UNLOCK_STATE
9	SECOND_DOOR_OPEN_STATE
10	SECOND_DOOR_CLOSE_STATE
11	GUARD_SECOND_DOOR_LOCK_STATE
12	EXIT_STATE

INPUT	VALUE	DATA	INDEX
LS	ls	person.id	0
RS	rs	person.id	1
WS	ws	person.weight	2
LO	lo		3
RO	ro		4
LC	lc		5
RC	rc		6
GRU	gru		7
GRL	grl		8
GLL	gll		9
GLU	glu		10
EXIT	exit		11

OUTPUT	VALUE	DATA	INDEX
OUT_LS_RS	“Person scanned ID, ID =”	person.id	0
OUT_WS	“Person weighed, weight =”	person.weight	1
OUT_LO	“Person opened left door”		2
OUT_RO	“Person opened right door”		3
OUT_LC	“Person closed left door”		4
OUT_RC	“Person closed right door”		5
OUT_GRU	“Right door unlocked by Guard”		6
OUT_GRL	“Right door unlocked by Guard”		7
OUT_GLL	“Left door locked by Guard”		8
OUT_GLU	“Left door unlocked by Guard”		9
OUT_EXIT	“Exit Display”		10