Homework 12: detailed design

void garage door control loop(void)

{

while(true)

{

if( door closed)

Turn off warning light;

else If(door is not close)

{

If(Floor sensor tripped)

Door::opening;

If(magnetic card swiped)

Door::opening;

If(Open button pushed)

Door: :opening;

}

if( door opening){

door open sensor tripped;

door:open;

}

else if (door open)

{

if(door opened 1 min)

door: closing;

if(closed button pushed)

door: closing;

}

else if( door open sensor tripped)

door::open;

else if (door closed sensor tripped)

door: :closing;

if(door opening){

turn on warning light;

stop button pushed;

door ::stopped;

}

else if (door stopped){

if(door stopped 1 min)

door: :closing;

if(close button pushed)

door:: closing;

}

else if (door closing){

if(door stopped 1 min)

door:: stopped;

if(optical beam broken)

door::stopped;

}

if (door stopped){

open button pushed;

door::opening;

else

there are no request, garage door is closed, do nothing

}