

Names of the inputs-outputs given in the homework text has been used as variable names and size of each is the same as in the homework text. Some additional variables has been used for the computational purposes (size of *currentTask* is 4 bits, *taskPool* is an array with size 8 and size of each cell is 4 bits, and *i, j* are integers). As stated in the homework text initial state of the system is IDLE. Followings are the assumed initial values of the variables.
state = 0, *listBusy* = 0, *listingLeds* = 0, *doorOpen* = 1, *currentFloor* = 1
currentTask = 0, *taskPool*[0 : 7] = {0,0,0,0,0,0,0,0}, *i* = 0, *j* = 0

