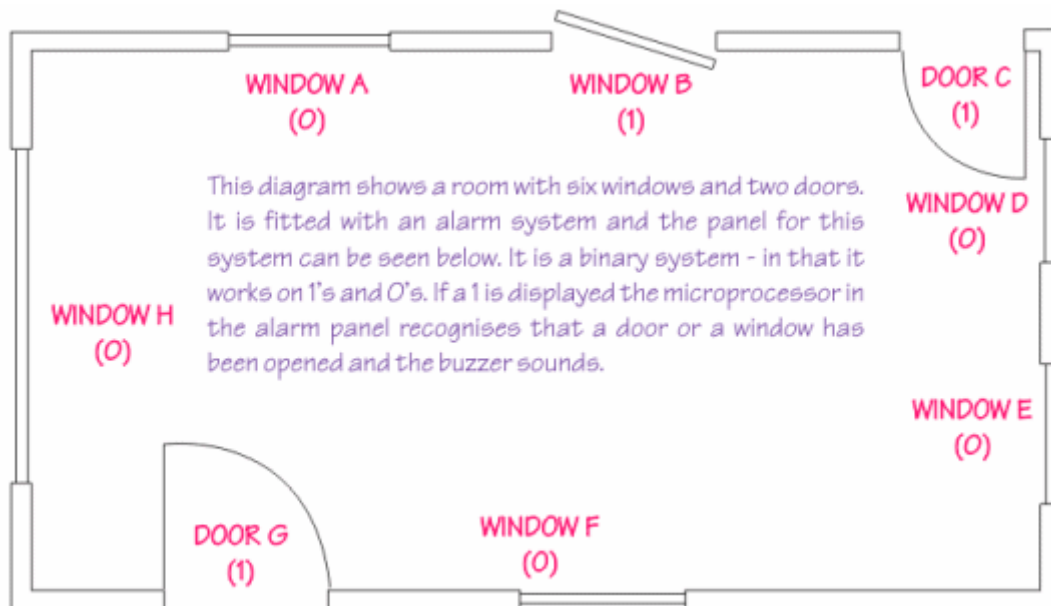


1^{ère} STI2D
Anglais

O. SAYADI
P. GILME

BITs AND BYTEs

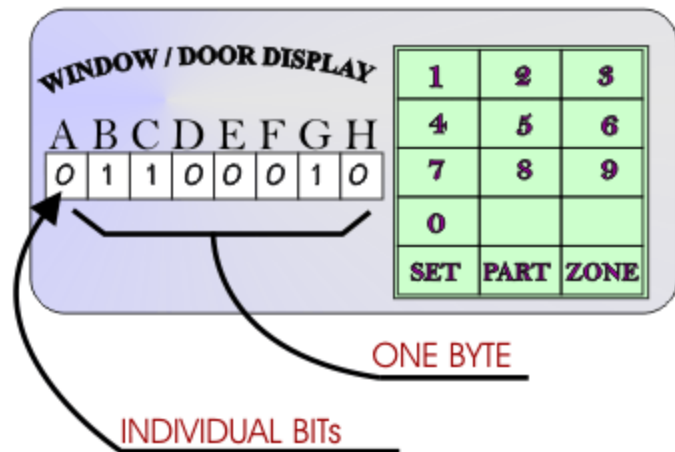
A typical alarm system uses **BITs** and **BYTEs** as the method of communication. For example, the room below shows doors and windows either closed or open. If a door or window is open it is represented as a '1' and if it is closed it is represented as a '0'. Remember a BIT is a '0' or a '1' and a BYTE is a line of 1s and 0s.



The alarm display panel opposite shows the individual BITS representing the doors and windows of the room. When seen on the panel the eight BITS become one BYTE.

In order to set the alarm all the doors and windows must be shut and the BIT for each door / window must be '0'.

If someone enters the room without deactivating the alarm at the panel, the intruder buzzer will sound because a 1 will replace a 0. The alarm detects this and the buzzer sounds.



1. Draw a plan of the ground floor of a semi-detached house. Include a hall way, living room, dining room and kitchen. There must be a door to each room and also a front and back door.
2. An alarm system is fitted which covers front, kitchen, living room, dining room and back doors AND also has three movement detectors. Design a display panel, similar to the one above, showing the individual BITS.
3. Print what the BYTE would look like if two of the doors blew open.