CS 145 Final Review

1. Define Embedded System
2. Moore’s Law
3. Microcontroller
4. GPIO: Strong and Weak, tree
5. C Language

* Types, hex, bitwise operations

1. State Machines

* Definition: a computational model intended for capturing time-ordered behavior.
* Transitions leaving a particular state should have **mutually**

1. **State Transitions:** transitions leaving a particular state should have **mutually exclusive** transition conditions.
2. **Anchors:**
3. **Current State:** At any time the system is “in” some state, called the **current state**
4. **Initial State:** The beginning state of the state machine, denoted by the initial arrow
5. **Tick:** A transition T leaving the current state and having a true condition is taken, Transition T’s target state has its actions executed once and becomes the current state
6. **Mealy vs Moore :**
7. **Transition on Boolean expression (mutual execution) :**