

### Algorithm:

- Start
- Add these Libraries
  - a) EEPROM
  - b) MFRC22
  - c) LiquidCrystal\_I2C
  - d) Keypad
  - e) Servo
  - f) SPI
  - g) Wire
- Void Setup Function
- Initialize Arduino pins for LEDs, Servo, Buzzer & tactile switch
- Initialize boolean variables match, programMode, replaceMaster & successRead
- Initialize arrays as storeCard, readCard, masterCard, storePass, password & masterPass
- Void Loop Function
- Conditional statements
  - a) Master Tag
    - i. Enter Pass
    - ii. If master tag scanned, then Exit
    - iii. If known tag scanned, then Remove from EEPROM
    - iv. If unknown tag scanned, then Enter New Pass & ADD to EEPROM
  - b) Other Tag
    - i. If known tag scanned, then Enter Pass & Grant Access
    - ii. If unknown tag scanned, then Deny Access
  - c) Wipe Button
    - i. Wipe Data
- Go To Void Loop Function