README for *chinch* code (for <mark>subjects</mark>)

Run *chinch.m* (in *chinchCODE* folder)

- OK welcome
- In GUI
    - o Pick subject in "ID" (upper left)
    - o Type in weight (use 999 for human - not relevant, but needed)
    - o Pick condition from drop down: Run name (NP)
        - ▪ Run 3 blocks of each of the 3 conditions
        - ▪ Use the following order to mix-up order effects
        - ▪ RCA CAR ARC *(9 total blocks, ~10 min each)*
            - • Where R: REF, C: CORR, A: ACORR
    - o Specify output file name according to following convention:
        - ▪ **H3_D1a_CMR3H_REF_test30_1365**
            - • Where
            - • **H3** = your subject ID
            - • **D1** = Day # (increase by 1 for each new day you collect data)
            - • **a** = block on that day (i.e., a, b, c, … increae by one for each block you run today)
            - • **CMR3H_REF_test30_1365**: Condition name
        - ▪ *This naming convention is used to sort data for analysis, where chins have hundreds of days*
    - o Press "Accept"
    - o Press "Run"
        - ▪ OK if asked about turning device panel on
        - ▪ "No" pellet test.
    - o 64 trials will run: follow instructions on command window
        - ▪ *BEFORE 1ˢᵗ trial, set your headphones (WIRED, in QUIET ROOM) to typical comfortable volume*
            - • *DURING 1ˢᵗ trial, make any adjustment required to volume – you will hear many tones in each trial so should be enough time to adjust if needed.*
        - ▪ <Enter> starts (and ends) a trial
            - • Trials are a random number of standard stimuli, with the last 4 being either:
                - o *<SIG STD SIG STD>* – if you hear SIG (tone), press *<Enter>*
                - o *<STD STD STD STD>* – If you do not hear SIG, only press *<Enter>* once sound has stopped.
                    - ▪ Where (STD: noise only; SIG: tone and noise)
        - ▪ You will receive "partial reinforcement" in the same manner the chinchillas do (they get food pellets as rewards, you get a message – sorry!)
            - • "reward" for *Hit* or *Correct Rejection* is seeing the word "CORRECT"
                - o This occurs only 90% of the time (same as for the chins).
                    - ▪ *This partial reinforcement is used in operant conditioning to resist extinction of a learned behavior, although it take longer to learn.*
            - • All other trials receive no feedback, just like the chins not getting a pellet.
- At end, two data files are created
    - o *.mat
    - o *.DAT (text file with trial by trial recap of scores:
        - ▪ Ab – abort (answering before response window (final 4 sounds: BABA or AAAA)
        - ▪ Ht – Hit: detected tone when present
        - ▪ Ms – Miss: Missed tone when present
        - ▪ CR – Correct Rejection: correctly did not respond when tone not present
        - ▪ FA – False Alarm: responded when tone was not present
- "Exit" to end, or run new condition.