Communicating with Crickets

Here’s an outline of how you can go about making your own “Dancing Crickets”. Start by building two LEGO “creatures,” each with two motors and a Cricket to control them.

One of the creatures will act as a “leader,” the other as a “follower”.

Here is a procedure for the leader:

```plaintext
to lead
    ab, repeat 6 [onfor 10 rd] ; do a little dance
    send 1 ; send a signal to indicate
    waituntil [newir?] ; “I’m done with my dance”
    lead
end
```

The leader does a dance, sends a signal to the follower telling it to do a dance, and then waits for a response before repeating its own dance.

Here is a procedure for the follower:

```plaintext
to follow
    waituntil [newir?] ; wait for signal from the leader
    ab, repeat 10 [onfor 5 rd] ; do a little dance
    send 2 ; send a signal to indicate
    follow
end
```

Download the procedures into both Crickets. Start the lead procedure running in one Cricket and the follow procedure in the other Cricket. And watch the Crickets dance!
Now try to design your own dance steps for the dancing Crickets. For example, try giving each Cricket several different dance steps, and use different IR signals to trigger different dance steps. You might write a procedure something like this:

```plaintext
to follow
    waituntil [newir?]
        ; wait for signal from the leader
        if ir = 3 [dance1]
            ; if IR signal is 3, run dance1 procedure
        if ir = 4 [dance2]
            ; if IR signal is 4, run dance2 procedure
        send 2
            ; send a signal to indicate
            ; “I’m done with my dance”
    follow
end
```