Goal:
The goal of this exercise is to reinforce your understanding of Behaviors in Tekkotsu and help you learn to carefully implement some of the motion principles introduced in lecture.

Detail:
This exercise requires the AIBO to perform some basic doggy tasks. The program will be required to demonstrate smooth, continuous motion while maintaining clear control over the transitions. In other words, your motions should not conflict in any way, and the changes between the motions should be relatively seamless. You must write at least one motion sequence and at least one posture. You may load postures in the motion sequence.

The behavior should act as follows:
• Pressing the head button should begin movement AND restart the behavior once it is finished. If it is easier, anytime the head is pressed, the behavior may restart.
• From any starting position, the AIBO should “stretch” so that the joints are put in a uniform position.
• After the stretch is done, have the AIBO slowly stand up and have the head pointed forward. Do NOT put stress on the motors. An intermediate posture/sequence may be required.
• From a standing position, have the AIBO walk ~2 ft forward, turn around (180 degrees), sidestep ~1 ft to its left, and walk ~2 ft forward (i.e. it should end up about a foot to the right of its starting position, facing the other direction).
• After stopping, slowly get the AIBO into a sitting posture (hind legs down, front legs up). Again, do NOT stress the motors.
• Once sitting, have the AIBO wave either of it's front paws side to side a few times. The paw should be raised to roughly head level.
• After (and only after) the wave is complete, keep the paw in the air and allow for someone to shake it's paw (press the raised paw's button).
• The AIBO should bark, lie down, and wag its tail after the paw button is pressed.

Hints:
• You may use the canned stand.pos, sit.pos, and liedown.pos posture files for those portions of the assignment, or write your own.
• You could go through the trouble of writing an entire MC to accomplish the wave, but there is no need to. It is recommended that you just write a simple motion sequence.
• The behavior is required to display smooth and continuous motion. The best way to handle this would be to monitor each motion and check for its completion before moving on to the next step and executing the next motion by allowing the motion to auto-prune as discussed in class and catching an event when that happens. The event generated will be motmanEGID with your motion_id as the SourceID.
• Use the ControllerGUI to test your sequences before adding them to a behavior.