# Test Case Document

Briefly describe each of your test case files, their expected output, and what they are intended to test.

* Think about simple test cases for the "average" or "regular" kind of input.
* What about edge cases -- upper and lower bounds on the expected input?
* What about unusual or tricky cases that might trip up some incorrect algorithms?
* What about testing for erroneous input?  Is this allowed within the problem statement?  If so, what kinds of input would you want to test for? (-> You can assume there will always be 96 data points, and they will always be formatted as described above and seen in the two example files. You do not need to check for erroneous input.)

**wolf\_common.txt**

Brief Description: This test case file is based on the scenario that the wolf starts at (10, 10) and the out‐and‐back sequence happens starting from 11:45 to 13:15.

Expected output: 01:30

Intention of the test case: This test case is for testing the common case.

**wolf\_edge.txt**

Brief Description: This test case file is based on the scenario that the wolf starts at (0, 0) and moves horizontally to the boundary, which is (499, 0), and then trace back to (0, 0) by reversely following the track that the wolf has moved to the boundary.

Expected output: 23:45

Intention of the test case: This test case is for testing the edge case of upper and lower bounds of the longitude while latitude remains as 0.

**wolf\_unusual.txt**

Brief Description: This test case file is based on the scenario that the wolf starts at (10, 10) and moves horizontally to (480, 10) and then starts to move upwards to (480, 480) while longitude remains as 480.

Expected output: An error message (output this to cerr) produced as “Not found!”

Intention of the test case: This test case is for testing the unusual case that there is no valid out‐and‐back sequence recorded during the day.