**Software Test Results**

**Insert Command**

1.1

Test Name: Test insert valid string

Expected output: aaabbb successfully entered into the input string list

Actual output: aaabbb successfully entered into the input string list

Test result: Success

1.2

Test Name: Test insert invalid string

Expected output: Input string aaabbc is not a valid string this machine can operate on.

Ignoring string aaabbc

Actual output: Input string aaabbc is not a valid string this machine can operate on.

Ignoring string aaabbc

Test result: Success

1.3

Test Name: Test insert duplicate string

Expected output: Input string “aabb” is already in the input string list.

Ignoring string aabb

Actual output: Input string “aabb” is already in the input string list.

Ignoring string aabb

Test result: Success

**Delete Command**

2.1

Test Name: Test delete valid string selection

Expected output: Removed aabb from the input string list

Actual output: Removed aabb from the input string list

Test result: Success

2.2.1

Test Name: Test delete invalid string selection: 0

Expected output: Error: Integer needs to be between 1 and 2

Actual output: Error: Integer needs to be between 1 and 2

Test result: Success

2.2.2

Test Name: Test delete invalid string selection: -1

Expected output: Error: Requires an integer value.

Input list unchanged

Actual output: Error: Requires an integer value.

Input list unchanged

Test result: Success

2.2.3

Test Name: Test delete invalid string selection: greater than list size

Expected output: Error: Integer needs to be between 1 and 2

Actual output:

Test result: Failure: No error message or any information displayed.

2.2.4

Test Name: Test delete invalid string selection: a

Expected output: Error: Requires an integer value.

Input list unchanged

Actual output: Error: Requires an integer value.

Input list unchanged

Test result: Success

**Set Command**

3.1

Test Name: Test valid set configuration

Expected output: Number of transitions to run in a single operation set to 32

Actual output: Number of transitions to run in a single operation set to 32

Test result: Success

3.2

Test Name: Test current set configuration

Expected output: Number of transitions to run in a single operation set to 1

Actual output: Number of transitions to run in a single operation set to 1

Test result: Success

3.3.1

Test Name: Test invalid set configuration: 0

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Number of transitions to run in a single operation set to 0

Test result: Failure: Didn’t catch error

3.3.2

Test Name: Test invalid set configuration: -1

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Error: requires an integer value greater than 0

Setting unchanged

Test result: Success

3.3.2

Test Name: Test invalid set configuration: a

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Error: requires an integer value greater than 0

Setting unchanged

Test result: Success

**Truncate Command**

4.1

Test Name: Test valid truncate configuration

Expected output: Number of cells to show in the instantaneous description 32

Actual output: Number of cells to show in the instantaneous description 32

Test result: Success

4.2

Test Name: Test current truncate configuration

Expected output: Number of cells to show in the instantaneous description 1

Actual output: Number of cells to show in the instantaneous description 1

Test result: Success

4.3.1

Test Name: Test invalid truncate configuration: 0

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Number of cells to show in the instantaneous description 0

Test result: Failure: Didn’t catch error

4.3.2

Test Name: Test invalid truncate configuration: -1

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Error: requires an integer value greater than 0

Setting unchanged

Test result: Success

4.3.2

Test Name: Test invalid truncate configuration: a

Expected output: Error: requires an integer value greater than 0

Setting unchanged

Actual output: Error: requires an integer value greater than 0

Setting unchanged

Test result: Success

**Run Command**

5.1.1

Test Name: Test run valid string: full run, accepted

Expected output: 0) [s0]aabb

13) XXYY-[s4]

Input string "aabb" was accepted in 13 transitions

Actual output: 0) [s0]aabb

13) XXYY-[s4]

Input string "aabb" was accepted in 13 transitions

Test result: Success

5.1.2

Test Name: Test run valid string: full run, rejected

Expected output: 0) [s0]abab

Undefined transition from s3 reading a.

4) XY[s3]ab

Input string "abab" was rejected in 4 transitions

Actual output: 0) [s0]abab

Undefined transition from s3 reading a.

4) XY[s3]ab

Input string "abab" was rejected in 4 transitions

Test result: Success

5.2.1

Test Name: Test run invalid string selection: 3

Expected output: Error: Integer needs to be between 1 and 2

Actual output: Integer needs to be between 1 and 2

Test result: Success

5.2.2

Test Name: Test run invalid string selection: 0

Expected output: Error: Integer needs to be between 1 and 2

Actual output: Integer needs to be between 1 and 2

Test result: Success

5.2.3

Test Name: Test run invalid string selection: -1

Expected output: Error: Requires an integer value.

Returning to top level

Actual output: Error: Requires an integer value.

Returning to top level

Test result: Success

5.2.4

Test Name: Test run invalid string selection: a

Expected output: Error: Requires an integer value.

Returning to top level

Actual output: Error: Requires an integer value.

Returning to top level

Test result: Success

5.2.5

Test Name: Test run invalid string selection: aabb

Expected output: Error: Requires an integer value.

Returning to top level

Actual output: Error: Requires an integer value.

Returning to top level

Test result: Success

5.3.1

Test Name: Test run when currently running: still running after

Expected output: 1) X[s1]abb

2) Xa[s1]bb

Actual output: 1) X[s1]abb

2) Xa[s1]bb

Test result: Success

5.3.2

Test Name: Test run when currently running: accepted after

Expected output: 13) XXYY-[s4]

13) XXYY-[s4]

Input string "aabb" was accepted in 13 transitions

Actual output: 13) XXYY-[s4]

13) XXYY-[s4]

Input string "aabb" was accepted in 13 transitions

Test result: Success

5.3.3

Test Name: Test run when currently running: rejected after

Expected output: 4) XY[s3]ab

Undefined transition from s3 reading a.

4) XY[s3]ab

Input string "abab" was rejected in 4 transitions

Actual output: 4) XY[s3]ab

Undefined transition from s3 reading a.

4) XY[s3]ab

Input string "abab" was rejected in 4 transitions

Test result: Success

**Quit Command**

6.1

Test Name: Test quit when not running

Expected output: Error: Machine not actively running, no action taken

Actual output: Error: Machine not actively running, no action taken

Test result: Success

6.2

Test Name: Test quit when string still running

Expected output: Input string "aabb" was neither accepted nor rejected within 1 transitions

Actual output: Input string "aabb" was neither accepted nor rejected within 1 transitions

Test result: Success

6.3

Test Name: Test quit when string just accepted

Expected output: Error: Machine not actively running, no action taken

Actual output: Error: Machine not actively running, no action taken

Test result: Success

6.4

Test Name: Test quit when string just rejected

Expected output: Error: Machine not actively running, no action taken

Actual output: Error: Machine not actively running, no action taken

Test result: Success