[\*] 24 tests passed:

- test\_generated\_mutants [0.13537 s]

[\*] Start mutants generation and execution:

- [# 1] AOR source\_to\_mutate: [0.18971 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 2] AOR source\_to\_mutate: [0.09563 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 3] AOR source\_to\_mutate: [0.08835 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 4] AOR source\_to\_mutate: [0.08557 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 5] AOR source\_to\_mutate: [0.11029 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 6] AOR source\_to\_mutate: [0.09204 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_four\_characters

- [# 7] AOR source\_to\_mutate: [0.09831 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 8] AOR source\_to\_mutate: [0.09692 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_single\_character

- [# 9] AOR source\_to\_mutate: [0.09425 s] incompetent

- [# 10] AOR source\_to\_mutate: [0.10861 s] survived

- [# 11] AOR source\_to\_mutate: [0.08978 s] incompetent

- [# 12] ROR source\_to\_mutate: [0.08997 s] killed by test\_generated\_mutants.py::test\_encode\_cyclic\_two\_characters

- [# 13] SIR source\_to\_mutate: [0.00000 s] incompetent

- [# 14] SIR source\_to\_mutate: [0.00000 s] incompetent

- [# 15] SIR source\_to\_mutate: [0.00000 s] incompetent

[\*] Mutation score [1.43096 s]: 90.0%

- all: 15

- killed: 9 (60.0%)

- survived: 1 (6.7%)

- incompetent: 5 (33.3%)

- timeout: 0 (0.0%)

[SUCCESS] Initial tests passed. Now calculating coverage and mutation score.

--- Step 4: Calculating test coverage ---

[INFO] Running coverage for target: mutation\_output\source\_to\_mutate.py, tests: mutation\_output\test\_generated\_mutants.py

Name Stmts Miss Branch BrPart Cover Missing

-----------------------------------------------------------------

source\_to\_mutate.py 6 0 0 0 100%

-----------------------------------------------------------------

TOTAL 6 0 0 0 100%

--- Step 5: Final Results ---

[INFO] Test Coverage: 100%

[INFO] Mutation Score: 90.00%

--- Analysis Finished ---

Process completed. Final test code is available in the output directory.