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

[\*] Start mutation process:

- targets: source\_to\_mutate

- tests: test\_generated\_mutants

[\*] Tests failed:

- fail in test\_generated\_mutants.py::test\_solve\_unicode\_characters - AssertionError

[INFO] Test failures detected. Attempting to fix...

[INFO] Running single test to get execution trace: test\_solve\_unicode\_characters

[INFO] Calling Gemini API (Temperature: 0.2)...

[INFO] Gemini API call successful.

[INFO] Surgically replacing function: test\_solve\_unicode\_characters

[INFO] Code saved to: mutation\_output\test\_generated\_mutants.py

--- Step 3: Running mutation testing (Attempt 3/40) ---

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

[\*] Start mutation process:

- targets: source\_to\_mutate

- tests: test\_generated\_mutants

[\*] 20 tests passed:

- test\_generated\_mutants [1.22477 s]

[\*] Start mutants generation and execution:

- [# 1] AOD source\_to\_mutate: [0.39099 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 2] AOR source\_to\_mutate: [0.17712 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 3] ASR source\_to\_mutate: [0.19741 s] killed by test\_generated\_mutants.py::test\_solve\_special\_characters\_and\_letters

- [# 4] ASR source\_to\_mutate: [0.20018 s] incompetent

- [# 5] COI source\_to\_mutate: [0.18572 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 6] COI source\_to\_mutate: [0.18313 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 7] CRP source\_to\_mutate: [0.19594 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 8] CRP source\_to\_mutate: [0.18557 s] killed by test\_generated\_mutants.py::test\_solve\_only\_letters\_lowercase

- [# 9] CRP source\_to\_mutate: [0.20533 s] survived

- [# 10] CRP source\_to\_mutate: [0.18307 s] killed by test\_generated\_mutants.py::test\_solve\_only\_letters\_lowercase

- [# 11] CRP source\_to\_mutate: [0.19733 s] killed by test\_generated\_mutants.py::test\_solve\_empty\_string

- [# 12] CRP source\_to\_mutate: [0.18529 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 13] CRP source\_to\_mutate: [0.17775 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 14] ROR source\_to\_mutate: [0.18336 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

- [# 15] SIR source\_to\_mutate: [0.18908 s] survived

- [# 16] SIR source\_to\_mutate: [0.16667 s] killed by test\_generated\_mutants.py::test\_solve\_only\_numbers

[\*] Mutation score [4.49618 s]: 86.7%

- all: 16

- killed: 13 (81.2%)

- survived: 2 (12.5%)

- incompetent: 1 (6.2%)

- 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 15 0 8 0 100%

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

TOTAL 15 0 8 0 100%

--- Step 5: Final Results ---

[INFO] Test Coverage: 100%

[INFO] Mutation Score: 86.70%

--- Analysis Finished ---