/home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana test-pollution-main/detect_test_pollution.py

Killed 61 out of 159 mutants

Survived

Survived mutation testing. These mutants show holes in your test suite.

Mutant 35

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -61,7 +61,7 @@

    def pytest_terminal_summary(self, config: pytest.Config) -> None:
        with open(self.filename, 'w') as f:
-           f.write(json.dumps(self.results, indent=2))
+           f.write(json.dumps(self.results, indent=3))

    def pytest_unconfigure(self, config: pytest.Config) -> None:
        config.pluginmanager.unregister(self)
```

Mutant 39

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -76,7 +76,7 @@
 def _run_pytest(*args: str) -> None:
     # XXX: this is potentially difficult to debug? maybe --verbose?
     subprocess.check_call(
-        (sys.executable, '-mpytest', *PYTEST_OPTIONS, *args),
+        (sys.executable, '-mpytest', /PYTEST_OPTIONS, *args),
         stdout=subprocess.DEVNULL,
     )
```

Mutant 40

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -76,7 +76,7 @@
 def _run_pytest(*args: str) -> None:
     # XXX: this is potentially difficult to debug? maybe --verbose?
     subprocess.check_call(
-        (sys.executable, '-mpytest', *PYTEST_OPTIONS, *args),
+        (sys.executable, '-mpytest', *PYTEST_OPTIONS, /args),
         stdout=subprocess.DEVNULL,
     )
```

Mutant 41

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -88,7 +88,7 @@
 def _discover_tests(path: str) -> list[str]:
     with tempfile.TemporaryDirectory() as tmpdir:
-        testids_filename = os.path.join(tmpdir, 'testids.txt')
+        testids_filename = os.path.join(tmpdir, 'XXtestids.txtXX')
         _run_pytest(
             path,
             # use `=` to avoid pytest's basedir detection
```

Mutant 45

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -100,7 +100,7 @@

 def _common_testpath(testids: list[str]) -> str:
-    paths = [testid.split('::')[0] for testid in testids]
+    paths = [testid.split('XX::XX')[0] for testid in testids]
     if not paths:
         return '.'
     else:
```

Mutant 52

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -109,7 +109,7 @@

 def _passed_with_testlist(path: str, test: str, testids: list[str]) -> bool:
     with tempfile.TemporaryDirectory() as tmpdir:
-        testids_filename = os.path.join(tmpdir, 'testids.txt')
+        testids_filename = os.path.join(tmpdir, 'XXtestids.txtXX')
         with open(testids_filename, 'w') as f:
             for testid in testids:
                 f.write(f'{testid}\n')
```

Mutant 57

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -115,7 +115,7 @@
                 f.write(f'{testid}\n')
             f.write(f'{test}\n')

-        results_json = os.path.join(tmpdir, 'results.json')
+        results_json = os.path.join(tmpdir, 'XXresults.jsonXX')

        with contextlib.suppress(subprocess.CalledProcessError):
            _run_pytest(
```

Mutant 69

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -142,7 +142,7 @@
    elif cmd_testids_filename is not None:
        args.extend(('--testids-filename', cmd_testids_filename))
    else:
-        raise AssertionError('unreachable?')
+        raise AssertionError('XXunreachable?XX')
    return shlex.join(args)
```

Mutant 70

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -153,7 +153,7 @@
    cmd_testids_filename: str | None,
 ) -> int:
    # make shuffling "deterministic"
-    r = random.Random()
+    r = None
    r.seed(1542676187, version=2)

    with tempfile.TemporaryDirectory() as tmpdir:
```

Mutant 71

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -154,7 +154,7 @@
 ) -> int:
    # make shuffling "deterministic"
    r = random.Random()
-    r.seed(1542676187, version=2)
+    r.seed(1542676188, version=2)

    with tempfile.TemporaryDirectory() as tmpdir:
        testids_filename = os.path.join(tmpdir, 'testids.txt')
```

Mutant 72

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -154,7 +154,7 @@
 ) -> int:
    # make shuffling "deterministic"
    r = random.Random()
-    r.seed(1542676187, version=2)
+    r.seed(1542676187, version=3)

    with tempfile.TemporaryDirectory() as tmpdir:
        testids_filename = os.path.join(tmpdir, 'testids.txt')
```

Mutant 73

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -157,7 +157,7 @@
    r.seed(1542676187, version=2)

    with tempfile.TemporaryDirectory() as tmpdir:
-        testids_filename = os.path.join(tmpdir, 'testids.txt')
+        testids_filename = os.path.join(tmpdir, 'XXtestids.txtXX')
        results_json = os.path.join(tmpdir, 'results.json')

        i = 0
```

Mutant 74

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -157,7 +157,7 @@
    r.seed(1542676187, version=2)

    with tempfile.TemporaryDirectory() as tmpdir:
-        testids_filename = os.path.join(tmpdir, 'testids.txt')
+        testids_filename = None
        results_json = os.path.join(tmpdir, 'results.json')

        i = 0
```

Mutant 75

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -158,7 +158,7 @@

     with tempfile.TemporaryDirectory() as tmpdir:
         testids_filename = os.path.join(tmpdir, 'testids.txt')
-        results_json = os.path.join(tmpdir, 'results.json')
+        results_json = os.path.join(tmpdir, 'XXresults.jsonXX')

         i = 0
         while True:
```

Mutant 76

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -158,7 +158,7 @@

     with tempfile.TemporaryDirectory() as tmpdir:
         testids_filename = os.path.join(tmpdir, 'testids.txt')
-        results_json = os.path.join(tmpdir, 'results.json')
+        results_json = None

         i = 0
         while True:
```

Mutant 77

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -160,7 +160,7 @@
         testids_filename = os.path.join(tmpdir, 'testids.txt')
         results_json = os.path.join(tmpdir, 'results.json')

-        i = 0
+        i = 1
         while True:
             i += 1
             print(f'run {i}...')
```

Mutant 78

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -160,7 +160,7 @@
         testids_filename = os.path.join(tmpdir, 'testids.txt')
         results_json = os.path.join(tmpdir, 'results.json')

-        i = 0
+        i = None
         while True:
             i += 1
             print(f'run {i}...')
```

Mutant 79

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -161,7 +161,7 @@
         results_json = os.path.join(tmpdir, 'results.json')

         i = 0
-        while True:
+        while False:
             i += 1
             print(f'run {i}...')
```

Mutant 80

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -162,7 +162,7 @@
         i = 0
         while True:
-            i += 1
+            i = 1
             print(f'run {i}...')

             r.shuffle(testids)
```

Mutant 81

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -162,7 +162,7 @@
         i = 0
         while True:
-            i += 1
+            i -= 1
             print(f'run {i}...')

             r.shuffle(testids)
```

Mutant 82

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -162,7 +162,7 @@

        i = 0
        while True:
-            i += 1
+            i += 2
            print(f'run {i}...')

            r.shuffle(testids)
```

Mutant 83

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -163,7 +163,7 @@
        i = 0
        while True:
            i += 1
-            print(f'run {i}...')
+            print(f'XXrun {i}...XX')

            r.shuffle(testids)
            with open(testids_filename, 'w') as f:
```

Mutant 84

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -166,7 +166,7 @@
            print(f'run {i}...')

            r.shuffle(testids)
-            with open(testids_filename, 'w') as f:
+            with open(testids_filename, 'XXwXX') as f:
                for testid in testids:
                    f.write(f'{testid}\n')
```

Mutant 85

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -168,7 +168,7 @@
            r.shuffle(testids)
            with open(testids_filename, 'w') as f:
                for testid in testids:
-                    f.write(f'{testid}\n')
+                    f.write(f'XX{testid}\nXX')

            try:
                _run_pytest(
```

Mutant 86

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -173,7 +173,7 @@
            try:
                _run_pytest(
                    testpath,
-                    '--maxfail=1',
+                    'XX--maxfail=1XX',
                    # use `=` to avoid pytest's basedir detection
                    f'{TESTIDS_INPUT_OPTION}={testids_filename}',
                    f'{RESULTS_OUTPUT_OPTION}={results_json}',
```

Mutant 87

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -175,7 +175,7 @@
                    testpath,
                    '--maxfail=1',
                    # use `=` to avoid pytest's basedir detection
-                    f'{TESTIDS_INPUT_OPTION}={testids_filename}',
+                    f'XX{TESTIDS_INPUT_OPTION}={testids_filename}XX',
                    f'{RESULTS_OUTPUT_OPTION}={results_json}',
                )
            except subprocess.CalledProcessError:
```

Mutant 88

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -176,7 +176,7 @@
                    '--maxfail=1',
                    # use `=` to avoid pytest's basedir detection
                    f'{TESTIDS_INPUT_OPTION}={testids_filename}',
-                    f'{RESULTS_OUTPUT_OPTION}={results_json}',
+                    f'XX{RESULTS_OUTPUT_OPTION}={results_json}XX',
                )
            except subprocess.CalledProcessError:
                print('-> found failing test!')
```

Mutant 89

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -179,7 +179,7 @@
                      f'{RESULTS_OUTPUT_OPTION}={results_json}',
                  )
              except subprocess.CalledProcessError:
-                 print('-> found failing test!')
+                 print('XX-> found failing test!XX')
              else:
                  print('-> OK!')
                  continue
```

Mutant 90

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -181,7 +181,7 @@
              except subprocess.CalledProcessError:
                  print('-> found failing test!')
              else:
-                 print('-> OK!')
+                 print('XX-> OK!XX')
                  continue

              with open(results_json) as f:
```

Mutant 91

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -182,7 +182,7 @@
                  print('-> found failing test!')
              else:
                  print('-> OK!')
-                 continue
+                 break

              with open(results_json) as f:
                  contents = json.load(f)
```

Mutant 92

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -185,7 +185,7 @@
                  continue

              with open(results_json) as f:
-                 contents = json.load(f)
+                 contents = None

              testids = list(contents)
              victim = testids[-1]
```

Mutant 93

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -187,7 +187,7 @@
              with open(results_json) as f:
                  contents = json.load(f)

-             testids = list(contents)
+             testids = None
              victim = testids[-1]

              cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
```

Mutant 94

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -188,7 +188,7 @@
                  contents = json.load(f)

              testids = list(contents)
-             victim = testids[-1]
+             victim = testids[+1]

              cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
              print(f'try `{cmd}`!')
```

Mutant 95

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -188,7 +188,7 @@
                  contents = json.load(f)

              testids = list(contents)
-             victim = testids[-1]
+             victim = testids[-2]

              cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
              print(f'try `{cmd}`!')
```

Mutant 96

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -188,7 +188,7 @@
                  contents = json.load(f)

          testids = list(contents)
-         victim = testids[-1]
+         victim = None

          cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
          print(f'try `{cmd}`!')
```

Mutant 97

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -190,7 +190,7 @@
          testids = list(contents)
          victim = testids[-1]

-         cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
+         cmd = None
          print(f'try `{cmd}`!')
          return 1
```

Mutant 98

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -191,7 +191,7 @@
          victim = testids[-1]

          cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
-         print(f'try `{cmd}`!')
+         print(f'XXtry `{cmd}`!XX')
          return 1
```

Mutant 99

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -192,7 +192,7 @@
          cmd = _format_cmd(victim, cmd_tests, cmd_testids_filename)
          print(f'try `{cmd}`!')
-         return 1
+         return 2


 def _bisect(testpath: str, failing_test: str, testids: list[str]) -> int:
```

Mutant 100

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -196,7 +196,7 @@

 def _bisect(testpath: str, failing_test: str, testids: list[str]) -> int:
-     if failing_test not in testids:
+     if failing_test  in testids:
          print('-> failing test was not part of discovered tests!')
          return 1
```

Mutant 101

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -197,7 +197,7 @@

 def _bisect(testpath: str, failing_test: str, testids: list[str]) -> int:
     if failing_test not in testids:
-         print('-> failing test was not part of discovered tests!')
+         print('XX-> failing test was not part of discovered tests!XX')
          return 1

     # step 2: make sure the failing test passes on its own
```

Mutant 102

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -198,7 +198,7 @@
 def _bisect(testpath: str, failing_test: str, testids: list[str]) -> int:
     if failing_test not in testids:
          print('-> failing test was not part of discovered tests!')
-         return 1
+         return 2

     # step 2: make sure the failing test passes on its own
     print('ensuring test passes by itself...')
```

Mutant 103

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -201,7 +201,7 @@
         return 1

    # step 2: make sure the failing test passes on its own
-    print('ensuring test passes by itself...')
+    print('XXensuring test passes by itself...XX')
    if _passed_with_testlist(testpath, failing_test, []):
        print('-> OK!')
    else:
```

Mutant 104

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -203,7 +203,7 @@
    # step 2: make sure the failing test passes on its own
    print('ensuring test passes by itself...')
    if _passed_with_testlist(testpath, failing_test, []):
-        print('-> OK!')
+        print('XX-> OK!XX')
    else:
        print('-> test failed! (output printed above)')
        return 1
```

Mutant 105

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -205,7 +205,7 @@
    if _passed_with_testlist(testpath, failing_test, []):
        print('-> OK!')
    else:
-        print('-> test failed! (output printed above)')
+        print('XX-> test failed! (output printed above)XX')
        return 1

    # we'll be bisecting testids
```

Mutant 106

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -206,7 +206,7 @@
        print('-> OK!')
    else:
        print('-> test failed! (output printed above)')
-        return 1
+        return 2

    # we'll be bisecting testids
    testids.remove(failing_test)
```

Mutant 107

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -212,7 +212,7 @@
    testids.remove(failing_test)

    # step 3: ensure test fails
-    print('ensuring test fails with test group...')
+    print('XXensuring test fails with test group...XX')
    if _passed_with_testlist(testpath, failing_test, testids):
        print('-> expected failure -- but it passed?')
        return 1
```

Mutant 108

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -214,7 +214,7 @@
    # step 3: ensure test fails
    print('ensuring test fails with test group...')
    if _passed_with_testlist(testpath, failing_test, testids):
-        print('-> expected failure -- but it passed?')
+        print('XX-> expected failure -- but it passed?XX')
        return 1
    else:
        print('-> OK!')
```

Mutant 109

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -215,7 +215,7 @@
    print('ensuring test fails with test group...')
    if _passed_with_testlist(testpath, failing_test, testids):
        print('-> expected failure -- but it passed?')
-        return 1
+        return 2
    else:
        print('-> OK!')
```

Mutant 110

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -217,7 +217,7 @@
             print('-> expected failure -- but it passed?')
             return 1
         else:
-            print('-> OK!')
+            print('XX-> OK!XX')

         # step 4: bisect time!
         n = 0
```

Mutant 111

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -220,7 +220,7 @@
             print('-> OK!')

        # step 4: bisect time!
-        n = 0
+        n = 1
        while len(testids) != 1:
            n += 1
            print(f'running step {n}:')
```

Mutant 112

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -220,7 +220,7 @@
             print('-> OK!')

        # step 4: bisect time!
-        n = 0
+        n = None
        while len(testids) != 1:
            n += 1
            print(f'running step {n}:')
```

Mutant 113

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -221,7 +221,7 @@

        # step 4: bisect time!
        n = 0
-        while len(testids) != 1:
+        while len(testids) == 1:
            n += 1
            print(f'running step {n}:')
            n_left = len(testids)
```

Mutant 114

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -221,7 +221,7 @@

        # step 4: bisect time!
        n = 0
-        while len(testids) != 1:
+        while len(testids) != 2:
            n += 1
            print(f'running step {n}:')
            n_left = len(testids)
```

Mutant 115

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -222,7 +222,7 @@
        # step 4: bisect time!
        n = 0
        while len(testids) != 1:
-            n += 1
+            n = 1
            print(f'running step {n}:')
            n_left = len(testids)
            steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
```

Mutant 116

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -222,7 +222,7 @@
        # step 4: bisect time!
        n = 0
        while len(testids) != 1:
-            n += 1
+            n -= 1
            print(f'running step {n}:')
            n_left = len(testids)
            steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
```

Mutant 117

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -222,7 +222,7 @@
     # step 4: bisect time!
     n = 0
     while len(testids) != 1:
-        n += 1
+        n += 2
         print(f'running step {n}:')
         n_left = len(testids)
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
```

Mutant 118

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -223,7 +223,7 @@
     n = 0
     while len(testids) != 1:
         n += 1
-        print(f'running step {n}:')
+        print(f'XXrunning step {n}:XX')
         n_left = len(testids)
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')
```

Mutant 119

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -224,7 +224,7 @@
     while len(testids) != 1:
         n += 1
         print(f'running step {n}:')
-        n_left = len(testids)
+        n_left = None
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')
```

Mutant 120

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -225,7 +225,7 @@
         n += 1
         print(f'running step {n}:')
         n_left = len(testids)
-        steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
+        steps_s = f'(about {math.ceil(math.log(n_left, 3))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')

        pivot = len(testids) // 2
```

Mutant 121

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -225,7 +225,7 @@
         n += 1
         print(f'running step {n}:')
         n_left = len(testids)
-        steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
+        steps_s = f'XX(about {math.ceil(math.log(n_left, 2))} steps)XX'
         print(f'- {n_left} tests remaining {steps_s}')

        pivot = len(testids) // 2
```

Mutant 122

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -225,7 +225,7 @@
         n += 1
         print(f'running step {n}:')
         n_left = len(testids)
-        steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
+        steps_s = None
         print(f'- {n_left} tests remaining {steps_s}')

        pivot = len(testids) // 2
```

Mutant 123

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -226,7 +226,7 @@
         print(f'running step {n}:')
         n_left = len(testids)
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
-        print(f'- {n_left} tests remaining {steps_s}')
+        print(f'XX- {n_left} tests remaining {steps_s}XX')

        pivot = len(testids) // 2
        part1 = testids[:pivot]
```

Mutant 124

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -228,7 +228,7 @@
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')

-        pivot = len(testids) // 2
+        pivot = len(testids) / 2
         part1 = testids[:pivot]
         part2 = testids[pivot:]
```

Mutant 125

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -228,7 +228,7 @@
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')

-        pivot = len(testids) // 2
+        pivot = len(testids) // 3
         part1 = testids[:pivot]
         part2 = testids[pivot:]
```

Mutant 126

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -228,7 +228,7 @@
         steps_s = f'(about {math.ceil(math.log(n_left, 2))} steps)'
         print(f'- {n_left} tests remaining {steps_s}')

-        pivot = len(testids) // 2
+        pivot = None
         part1 = testids[:pivot]
         part2 = testids[pivot:]
```

Mutant 127

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -229,7 +229,7 @@
         print(f'- {n_left} tests remaining {steps_s}')

         pivot = len(testids) // 2
-        part1 = testids[:pivot]
+        part1 = None
         part2 = testids[pivot:]

         if _passed_with_testlist(testpath, failing_test, part1):
```

Mutant 128

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -230,7 +230,7 @@
         pivot = len(testids) // 2
         part1 = testids[:pivot]
-        part2 = testids[pivot:]
+        part2 = None

         if _passed_with_testlist(testpath, failing_test, part1):
             testids = part2
```

Mutant 129

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -233,7 +233,7 @@
         part2 = testids[pivot:]

         if _passed_with_testlist(testpath, failing_test, part1):
-            testids = part2
+            testids = None
         else:
             testids = part1
```

Mutant 130

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -235,7 +235,7 @@
         if _passed_with_testlist(testpath, failing_test, part1):
             testids = part2
         else:
-            testids = part1
+            testids = None

    # step 5: make sure it still fails
    print('double checking we found it...')
```

Mutant 131

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -238,7 +238,7 @@
            testids = part1

     # step 5: make sure it still fails
-    print('double checking we found it...')
+    print('XXdouble checking we found it...XX')
     if _passed_with_testlist(testpath, failing_test, testids):
         raise AssertionError('unreachable? unexpected pass? report a bug?')
     else:
```

Mutant 132

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -240,7 +240,7 @@
     # step 5: make sure it still fails
     print('double checking we found it...')
     if _passed_with_testlist(testpath, failing_test, testids):
-        raise AssertionError('unreachable? unexpected pass? report a bug?')
+        raise AssertionError('XXunreachable? unexpected pass? report a bug?XX')
     else:
         print(f'-> the polluting test is: {testids[0]}')
         return 0
```

Mutant 133

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -242,7 +242,7 @@
     if _passed_with_testlist(testpath, failing_test, testids):
         raise AssertionError('unreachable? unexpected pass? report a bug?')
     else:
-        print(f'-> the polluting test is: {testids[0]}')
+        print(f'-> the polluting test is: {testids[1]}')
         return 0
```

Mutant 134

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -242,7 +242,7 @@
     if _passed_with_testlist(testpath, failing_test, testids):
         raise AssertionError('unreachable? unexpected pass? report a bug?')
     else:
-        print(f'-> the polluting test is: {testids[0]}')
+        print(f'XX-> the polluting test is: {testids[0]}XX')
         return 0
```

Mutant 135

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -243,7 +243,7 @@
        raise AssertionError('unreachable? unexpected pass? report a bug?')
     else:
         print(f'-> the polluting test is: {testids[0]}')
-        return 0
+        return 1


 def main(argv: Sequence[str] | None = None) -> int:
```

Mutant 136

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -247,7 +247,7 @@


 def main(argv: Sequence[str] | None = None) -> int:
-    parser = argparse.ArgumentParser()
+    parser = None

     mutex1 = parser.add_mutually_exclusive_group(required=True)
     mutex1.add_argument(
```

Mutant 137

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -249,7 +249,7 @@
 def main(argv: Sequence[str] | None = None) -> int:
     parser = argparse.ArgumentParser()

-    mutex1 = parser.add_mutually_exclusive_group(required=True)
+    mutex1 = parser.add_mutually_exclusive_group(required=False)
     mutex1.add_argument(
         '--fuzz',
         action='store_true',
```

Mutant 138

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -249,7 +249,7 @@
 def main(argv: Sequence[str] | None = None) -> int:
     parser = argparse.ArgumentParser()

-    mutex1 = parser.add_mutually_exclusive_group(required=True)
+    mutex1 = None
     mutex1.add_argument(
         '--fuzz',
         action='store_true',
```

Mutant 139

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -251,7 +251,7 @@
     mutex1 = parser.add_mutually_exclusive_group(required=True)
     mutex1.add_argument(
-        '--fuzz',
+        'XX--fuzzXX',
         action='store_true',
         help='repeatedly shuffle the test suite searching for failures',
     )
```

Mutant 140

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -252,7 +252,7 @@
     mutex1 = parser.add_mutually_exclusive_group(required=True)
     mutex1.add_argument(
         '--fuzz',
-        action='store_true',
+        action='XXstore_trueXX',
         help='repeatedly shuffle the test suite searching for failures',
     )
     mutex1.add_argument(
```

Mutant 141

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -253,7 +253,7 @@
     mutex1.add_argument(
         '--fuzz',
         action='store_true',
-        help='repeatedly shuffle the test suite searching for failures',
+        help='XXrepeatedly shuffle the test suite searching for failuresXX',
     )
     mutex1.add_argument(
         '--failing-test',
```

Mutant 142

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -256,7 +256,7 @@
         help='repeatedly shuffle the test suite searching for failures',
     )
     mutex1.add_argument(
-        '--failing-test',
+        'XX--failing-testXX',
         help=(
             'the identifier of the failing test, '
             'for example `tests/my_test.py::test_name_here`'
```

Mutant 143

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -258,7 +258,7 @@
     mutex1.add_argument(
         '--failing-test',
         help=(
-            'the identifier of the failing test, '
+            'XXthe identifier of the failing test, XX'
             'for example `tests/my_test.py::test_name_here`'
        ),
     )
```

Mutant 144

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -259,7 +259,7 @@
        '--failing-test',
        help=(
            'the identifier of the failing test, '
-            'for example `tests/my_test.py::test_name_here`'
+            'XXfor example `tests/my_test.py::test_name_here`XX'
        ),
     )
```

Mutant 145

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -263,7 +263,7 @@
         ),
     )

-    mutex2 = parser.add_mutually_exclusive_group(required=True)
+    mutex2 = parser.add_mutually_exclusive_group(required=False)
    mutex2.add_argument(
        '--tests',
        help='where tests will be discovered from, often `--tests=tests/',
```

Mutant 146

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -263,7 +263,7 @@
         ),
     )

-    mutex2 = parser.add_mutually_exclusive_group(required=True)
+    mutex2 = None
    mutex2.add_argument(
        '--tests',
        help='where tests will be discovered from, often `--tests=tests/',
```

Mutant 147

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -265,7 +265,7 @@
    mutex2 = parser.add_mutually_exclusive_group(required=True)
    mutex2.add_argument(
-        '--tests',
+        'XX--testsXX',
        help='where tests will be discovered from, often `--tests=tests/',
    )
    mutex2.add_argument(
```

Mutant 148

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -266,7 +266,7 @@
    mutex2 = parser.add_mutually_exclusive_group(required=True)
    mutex2.add_argument(
        '--tests',
-        help='where tests will be discovered from, often `--tests=tests/',
+        help='XXwhere tests will be discovered from, often `--tests=tests/XX',
    )
    mutex2.add_argument(
        '--testids-file',
```

Mutant 149

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -269,7 +269,7 @@
        help='where tests will be discovered from, often `--tests=tests/',
    )
    mutex2.add_argument(
-        '--testids-file',
+        'XX--testids-fileXX',
        help='optional pre-discovered test ids (one per line)',
    )
    args = parser.parse_args(argv)
```

Mutant 150

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -270,7 +270,7 @@
    )
    mutex2.add_argument(
        '--testids-file',
-        help='optional pre-discovered test ids (one per line)',
+        help='XXoptional pre-discovered test ids (one per line)XX',
    )
    args = parser.parse_args(argv)
```

Mutant 151

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -272,7 +272,7 @@
        '--testids-file',
        help='optional pre-discovered test ids (one per line)',
    )
-    args = parser.parse_args(argv)
+    args = None

    # step 1: discover all the tests
    print('discovering all tests...')
```

Mutant 152

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -275,7 +275,7 @@
     args = parser.parse_args(argv)

     # step 1: discover all the tests
-    print('discovering all tests...')
+    print('XXdiscovering all tests...XX')
     if args.testids_file:
         testids = _parse_testids_file(args.testids_file)
         print(f'-> pre-discovered {len(testids)} tests!')
```

Mutant 153

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -277,7 +277,7 @@
     # step 1: discover all the tests
     print('discovering all tests...')
     if args.testids_file:
-        testids = _parse_testids_file(args.testids_file)
+        testids = None
         print(f'-> pre-discovered {len(testids)} tests!')
     else:
         testids = _discover_tests(args.tests)
```

Mutant 154

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -278,7 +278,7 @@
     print('discovering all tests...')
     if args.testids_file:
         testids = _parse_testids_file(args.testids_file)
-        print(f'-> pre-discovered {len(testids)} tests!')
+        print(f'XX-> pre-discovered {len(testids)} tests!XX')
     else:
         testids = _discover_tests(args.tests)
         print(f'-> discovered {len(testids)} tests!')
```

Mutant 155

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -280,7 +280,7 @@
         testids = _parse_testids_file(args.testids_file)
         print(f'-> pre-discovered {len(testids)} tests!')
     else:
-        testids = _discover_tests(args.tests)
+        testids = None
         print(f'-> discovered {len(testids)} tests!')

     testpath = _common_testpath(testids)
```

Mutant 156

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -281,7 +281,7 @@
         print(f'-> pre-discovered {len(testids)} tests!')
     else:
         testids = _discover_tests(args.tests)
-        print(f'-> discovered {len(testids)} tests!')
+        print(f'XX-> discovered {len(testids)} tests!XX')

     testpath = _common_testpath(testids)
```

Mutant 157

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -283,7 +283,7 @@
         testids = _discover_tests(args.tests)
         print(f'-> discovered {len(testids)} tests!')

-    testpath = _common_testpath(testids)
+    testpath = None

     if args.fuzz:
         return _fuzz(testpath, testids, args.tests, args.testids_file)
```

Mutant 158

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -291,6 +291,6 @@
         return _bisect(testpath, args.failing_test, testids)


-if __name__ == '__main__':
+if __name__ != '__main__':
     raise SystemExit(main())
```

Mutant 159

```
--- /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
+++ /home/rodrigo/repos/personal/college/Teste_Software_Mutantes_2024_santana_rodrigo/detect-test-pollution-main/detect_test_pollution.py
@@ -291,6 +291,6 @@
         return _bisect(testpath, args.failing_test, testids)


-if __name__ == '__main__':
+if __name__ == 'XX__main__XX':
     raise SystemExit(main())
```