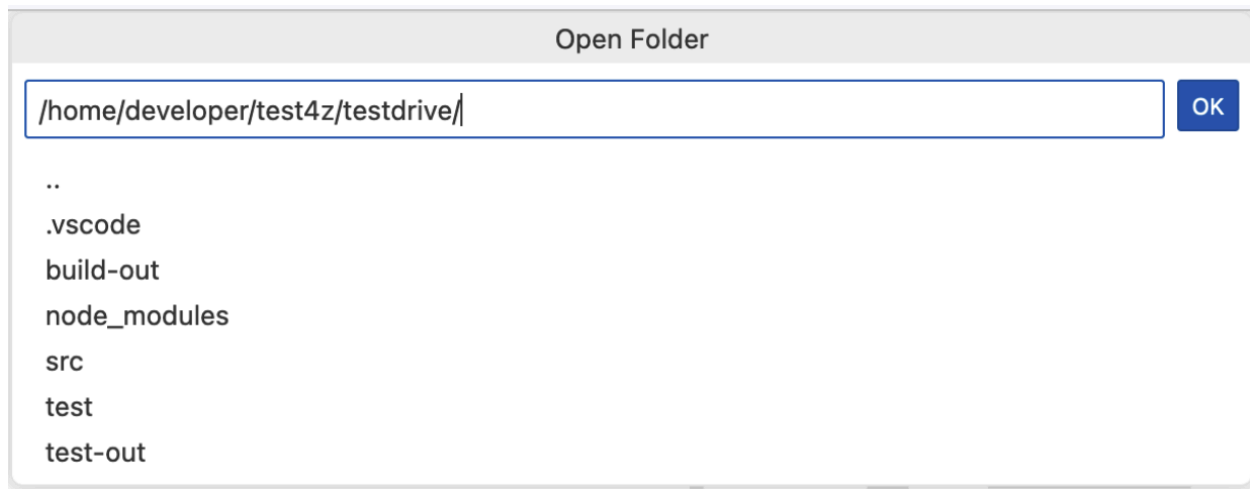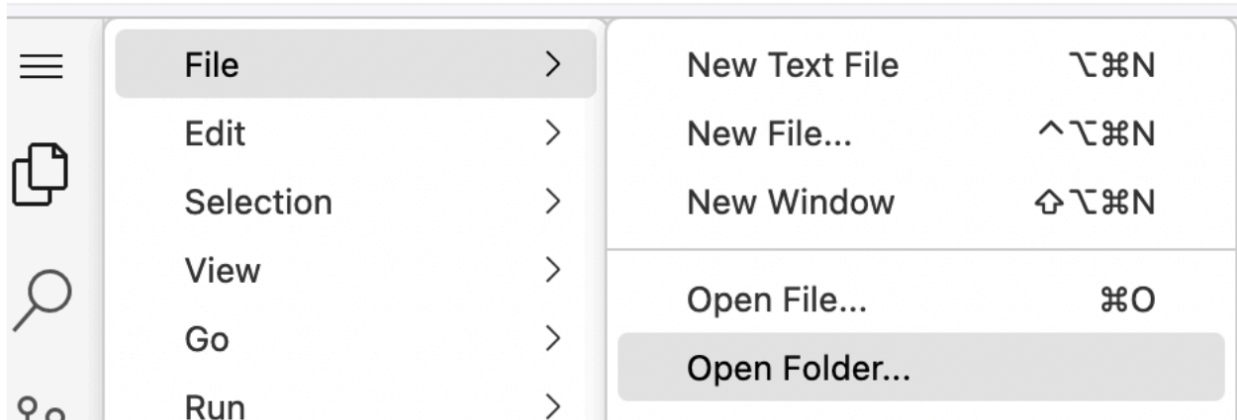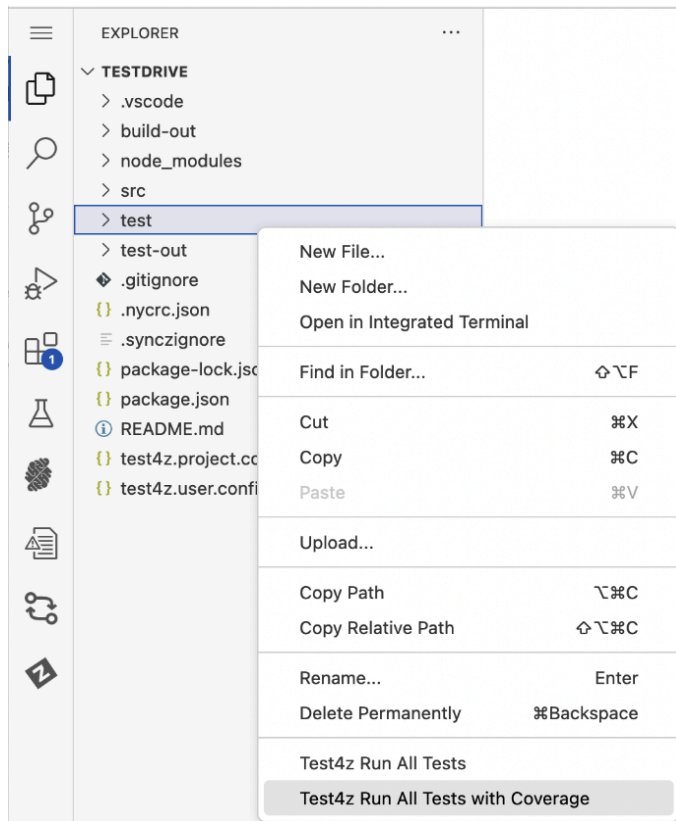# Test Challenge

Test the DOGGOS application

From the VS Code Explorer, Open the TestDrive Folder. Reference screenshots:

Generate Test coverage report

Right click on the Test Folder and select "Test4z Run All Tests with Coverage".
Reference screenshot:

This will generate the report.
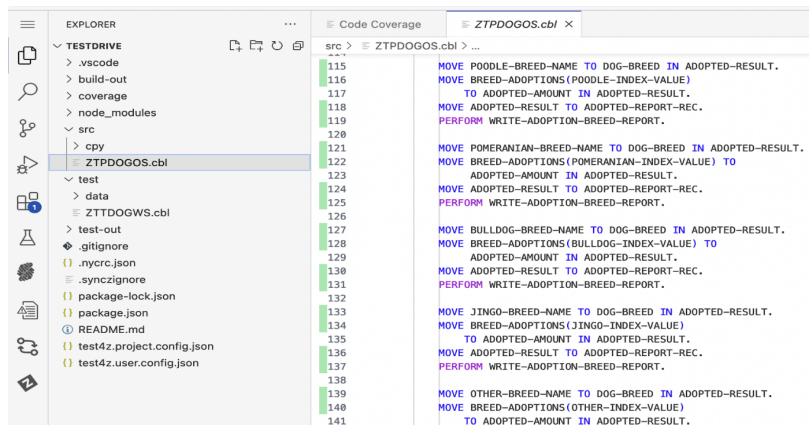
From the Explorer tab, Open the src folder.
Open the source code file "ZTPDOGOS.cbl".
VSCode Coverage Gutters in the source code file are observed.

Edit a Test case

Open the ZTTDOGWS.cbl file under test → data folder
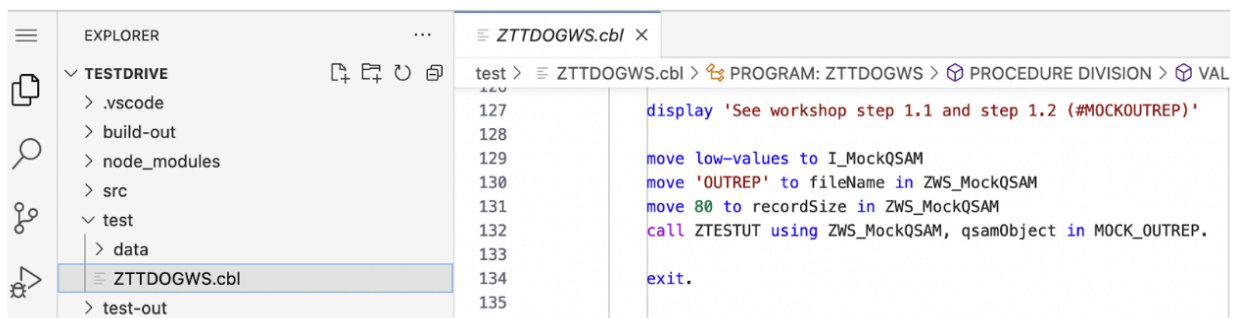
Go to line number 196.
Change the value from 9 to 900.

Reference screenshot:

```
194              display 'See workshop step 3.3 (#VALIDATEOUTREP)'
195
196          if OUTREP_SPY_WRITE_COUNT not = 900 then
197              perform failOutrepWriteCount
198          end-if
```

From the command line, run the "t4z" command.
Reference screenshot:

You will observe that the test run is a failure. Expected Record count is 9 whereas we edited the value to be 900.

Add statements to Test File

Open the ZTTDOGWS.cbl file under test → data folder

Go to line 51 (Be under the PROCEDURE DIVISION section). Reference Screenshot:

```
≡ ZTTDOGWS.cbl ✕

test  >  ≡ ZTTDOGWS.cbl  >  ⅋ PROGRAM: ZTTDOGWS  >  ⊘ PROCEDURE DIVISION
 42        * Reference to ZTPDOGOS accumulator retrived via ZWS_GetVariable.
 43          1 ZTPDOGOS-ACCUMULATOR.
 44              5 BREED-ADOPTIONS PIC 9(3) OCCURS 9 TIMES.
 45
 46        * Reference to ZTPDOGOS record from ZWS_SpyQSAM callback.
 47        * (ADOPTED-REPORT-REC)
 48              COPY ZTPDGARR.
 49
 50          PROCEDURE DIVISION.
 51
 52
 53
```

Move the cursor to column 12.
Type "t4z me".
Note: It will start filling out the intellisense.
Select "t4z Message write".

Reference Screenshots:

```
 50        PROCEDURE DIVISION.
 51
 52            t4z me
 53          ┌─────────────────────────────────────────────────────────────┐
 54   ***********│ ☐ t4z Message write                    t4z message write  │
 55   * Register │ ☐ t4z MockESDS file                  t4z mock ESDS file   │
 56   ***********│ ☐ t4z MockESDS file data      t4z mock ESDS file with file data │
 57      move l │ ☐ t4z MockESDS file recorded da…  t4z mock ESDS file with re… │
 58      set te │ ☐ t4z LLMockESDS file low-level   t4z low-level mock file ES… │
 59      move ' │ ☐ t4z PrepareModule                   t4z prepare module   │
 60      call Z │ ☐ t4z MockKSDS file                  t4z mock KSDS file    │
 61             │ ☐ t4z MockKSDS file data      t4z mock KSDS file with file data │
 62   * Note: Tes│ ☐ t4z MockKSDS file with recorded d…  t4z mock KSDS file wi… │
 63   * is prepar│ ☐ t4z MockQSAM file                  t4z mock QSAM file    │
 64             │ ☐ t4z MockQSAM file data      t4z mock QSAM file with file data │
             │ ☐ t4z MockQSAM file with recorded d…  t4z mock QSAM file wi… │
          └─────────────────────────────────────────────────────────────┘
```

This will fill in the code for the user.

```
49
50          PROCEDURE DIVISION.
51
52              move low-values to I_Message in ZWS_Message
53              move 'Your message' to messageText in ZWS_Message
54              call ZTESTUT using ZWS_Message
55
```

Replace "Your Message" with "Hello Test4z" and save the file.

```
50          PROCEDURE DIVISION.
51
52              move low-values to I_Message in ZWS_Message
53              move 'Hello Test4z' to messageText in ZWS_Message
54              call ZTESTUT using ZWS_Message
55
```

Go to line number 196.
Change the value from 900 to 9.
Reference screenshot:

```
194          display 'See workshop step 3.3 (#VALIDATEOUTREP)'
195
196          if OUTREP_SPY_WRITE_COUNT not = 9 then
197             perform failOutrepWriteCount
198          end-if
```

From the command line, Run "t4z". Reference screenshot of command line output.

Select "ZLMSG.txt" file from the "test-out" folder. This file contains the statements that are added to the test files. You will see the "Hello Test4z" statement that was added.
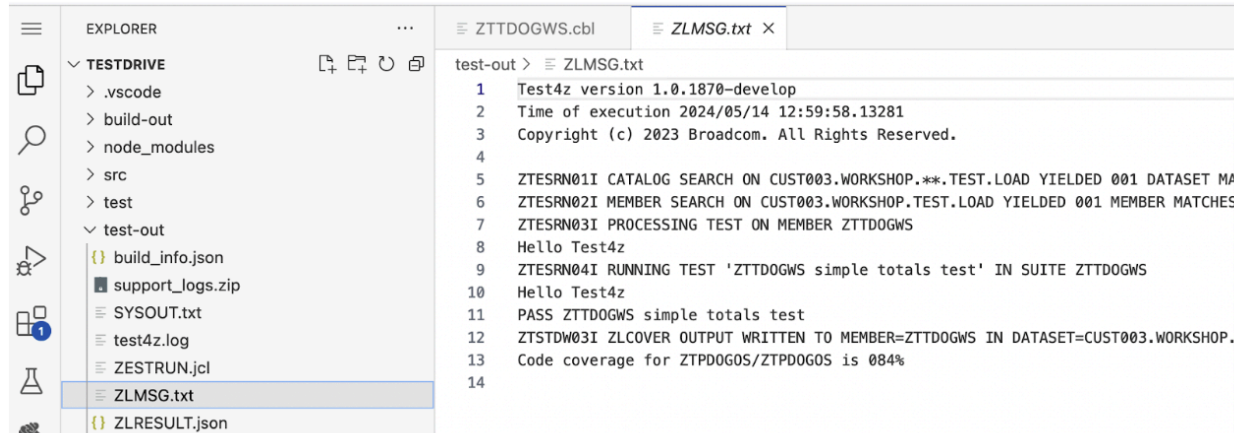
Conclusion

This demo scenario shows how to generate a test coverage report, edit a test case and add statements to a test file.