

Team 6 Deliverable 5

The goal of this deliverable was to inject faults into our local copy of the code to be tested. The hurdle for us was the realization that some of the methods we were testing happened to be named the same thing as python built in functions, so our script was actually executing the built in functions, rather than our local copy of jython's version of those functions. To fix this, we added a more strict path definition to the requirements of our framework. In the future, we hope to allow the user to specify the location of their copy of jython, but as of right now, our framework assumes that the copy of jython being tested is in the following path:

/users/<username>/jython

The following faults were injected into our copy of jython to cause our tests to fail.

1) Test case #5

file: jython/lib-python/2.7/string.py

Line number: 26

Changed From:

```
return (sep or ' ').join(x.capitalize() for x in s.split(sep))
```

Changed To:

```
return (sep or ' ').join(x.upper() for x in s.split(sep))
```

2) Test cases #6, #21

file: jython/lib-python/2.7/urlparse.py

Line number: 325

Changed From: `res = s.split('%20')`

Changed To: `res = s.split(' ')`

3) Test case #12

file: jython/lib-python/2.7/fractions.py

Line number: 25

Changed From: `a, b = b, a%b`

Changed To: `a, b = b, a//b`

4) Test cases #18

file: jython/lib-python/2.7/string.py

Line number: 467

Changed From: `return x.zfill(width)`

Changed To: `return x.zfill(width * 2)`

As a result of the following fault injections, test cases 5, 6, 12, 18, and 21 all fail.