

Analiza i Bazy Danych

Laboratorium 14

Zgodnie z podejściem TDD w pierwszej kolejności napisano test:

```
testlists = [[32, 15, 8, 2, 9, 1, 68, 22, 4],
             [5, 4, 3, 2, 1, 0, -2, 1]
            ]

@pytest.mark.parametrize('sample', testlists)
def test_bubblesort(sample):
    out_list = bubblesort(sample)
    expected_list = sorted(sample)
    assert out_list == expected_list

===== FAILURES =====
_____ test_bubblesort[sample0] _____

sample = [32, 15, 8, 2, 9, 1, ...]

    @pytest.mark.parametrize('sample', testlists)
    def test_bubblesort(sample):
>         out_list = bubblesort(sample)
E         NameError: name 'bubblesort' is not defined

test/test_app.py:38: NameError
_____ test_bubblesort[sample1] _____

sample = [5, 4, 3, 2, 1, 0, ...]

    @pytest.mark.parametrize('sample', testlists)
    def test_bubblesort(sample):
>         out_list = bubblesort(sample)
E         NameError: name 'bubblesort' is not defined

test/test_app.py:38: NameError

===== short test summary info =====
FAILED test/test_app.py::test_bubblesort[sample0] - NameError: nam...
FAILED test/test_app.py::test_bubblesort[sample1] - NameError: nam...
===== 2 failed, 4 passed in 1.14s =====

user@user:~/public_lectures/
user@user:~/public_lectures/
user@user:~/public_lectures/
Analiza i Bazy Danych 2021/L
user@user:~/public_lectures/A
naliza i Bazy Danych 2021/Lab
user@user:~/public_lectures/Analiza i Bazy Danych 2021/Lab14$
```

Następnie napisano odpowiednią funkcję w pliku app.py:

```
def bubblesort(in_list: list):  
    n = len(in_list)  
  
    for i in range(n):  
        for j in range(n-i-1):  
            if in_list[j] > in_list[j+1]:  
                in_list[j], in_list[j+1] = in_list[j+1], in_list[j]  
    return in_list
```

Po zaimportowaniu powyższej funkcji do pliku test_app.py napisana funkcjonalność poprawnie przechodzi test:

```
===== 2 failed, 4 passed in 1.42s =====  
user@user:~/public_lectures/Analiza i Bazy Danych 2021/Lab14$ /bin/python3 "/home/user/public_lectures/Analiza i Bazy Danych 2021/Lab14/app.py"  
user@user:~/public_lectures/Analiza i Bazy Danych 2021/Lab14$ python3 -m pytest  
===== test session starts =====  
platform linux -- Python 3.8.10, pytest-6.2.5, py-1.10.0, pluggy-1.0.0  
rootdir: /home/user/public_lectures/Analiza i Bazy Danych 2021/Lab14  
collected 6 items  
  
test/test_app.py .....  
  
===== 6 passed in 1.05s =====
```