

Python: unittest moduli bilan funksiyalarni testlash

1. unittest nima?

unittest — Python'ning standart testlash moduli bo'lib, siz yaratgan funksiyalar, klasslar va metodlarning to'g'ri i

2. Oddiy funksiyani test qilish

```
def toq_mi(son):  
    return son % 2 == 1
```

```
import unittest  
from my_module import toq_mi
```

```
class TestToqMi(unittest.TestCase):  
    def test_toq_mi(self):  
        self.assertTrue(toq_mi(5))  
    def test_juft_mi(self):  
        self.assertFalse(toq_mi(4))
```

```
if __name__ == '__main__':  
    unittest.main()
```

3. Foydali metodlar

- `assertEqual(a, b)`: `a == b` bo'lsa test o'tadi
- `assertTrue(x)`: `x` True bo'lsa test o'tadi
- `assertFalse(x)`: `x` False bo'lsa test o'tadi
- `assertIn(x, y)`: `x` `y` ichida bo'lsa
- `assertRaises(Error, func, args...)`: xatolik kutilsa

4. Ko'proq holatlar bilan testlash

```
class TestToqMi(unittest.TestCase):  
    def test_musbat_toq(self):  
        self.assertTrue(toq_mi(9))  
    def test_musbat_juft(self):  
        self.assertFalse(toq_mi(10))  
    def test_nol(self):  
        self.assertFalse(toq_mi(0))  
    def test_manfiy_toq(self):  
        self.assertTrue(toq_mi(-3))  
    def test_manfiy_juft(self):  
        self.assertFalse(toq_mi(-8))
```

5. Testni terminalda ishga tushirish

Fayl nomi `test_toq_mi.py` bo'lsa:
`python test_toq_mi.py`

6. Xatolik bo'lsa nima bo'ladi?

```
def test_xato(self):
```