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Кафедра «Системы обработки информации и управления»



**Отчет по ЛР №4  
“Разработка интернет-приложений”**

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Задача ЛР

Изучение функциональных возможностей языка Python

Исходный код

|  |  |
| --- | --- |
| from gens import \* | |
|  |  |
|  | goods = [ |
|  | {'title': 'Kover', 'price': 2000, 'color': 'green'}, |
|  | {'title': 'Coach for rest', 'price': 5300, 'color': 'black'}, |
|  | {'title': 'Stellag', 'price': 7000}, |
|  | {'title': 'veshalka dla odegda', 'price': 800, 'color': 'white'} |
|  | ] |
|  |  |
|  | for i in field(goods, 'title', 'color'): |
|  | print(i, ',', ) |
|  | print('\n') |
|  | for i in gen\_random(1, 3, 5): |
|  | print(i, ',', ) |

|  |  |  |  |
| --- | --- | --- | --- |
| from gens import gen\_random | | | |
|  | | | from iterators import Unique |
|  | | |  |
|  | | | data0 = [1, 1 ,'a', 1, 1, 1, 2, 2, 2, 2, 2] |
|  | | | data1 = gen\_random(1, 3, 10) data2= ['a', 'A', 'A', 'a', 'C', 'a', 'a', 'b', 'b', 'b', 'b', 'b'] |
|  | | |  |
|  | | | d0 = Unique(data0) |
|  | | | for x in d0: |
|  | | | print(x, ) |
|  | | |  |
|  | | | d1 = Unique(list(data1)) |
|  | | | for x in d1: |
|  | | | print(x, ) |
|  | | |  |
|  | | | d2 = Unique(data2, ignore\_case=True) |
|  | | | for x in d2: |
|  | | | print(x, ) |
| import math | | | |
|  | |  | |
|  | | data = [4, -30, 100, -100, 123, 1, 0, -1, -4] | |
|  | |  | |
|  | |  | |
|  | | print(sorted(data, key=lambda x: math.fabs(x)), data) | |
| from decorators import print\_result | | | |
|  |  | | |
|  |  | | |
|  | @print\_result | | |
|  | def test\_1(): | | |
|  | return 1 | | |
|  |  | | |
|  |  | | |
|  | @print\_result | | |
|  | def test\_2(): | | |
|  | return 'iu' | | |
|  |  | | |
|  |  | | |
|  | @print\_result | | |
|  | def test\_3(): | | |
|  | return {'a': 1, 'b': 2} | | |
|  |  | | |
|  |  | | |
|  | @print\_result | | |
|  | def test\_4(): | | |
|  | return [1, 2] | | |
|  |  | | |
|  |  | | |
|  | test\_1() | | |
|  | test\_2() | | |
|  | test\_3() | | |
|  | test\_4() | | |

|  |  |
| --- | --- |
| from time import sleep | |
|  | from ctxmngrs import timer |
|  |  |
|  | with timer(): |
|  | sleep(5.5) |

|  |  |
| --- | --- |
| import json | |
|  | import sys |
|  | from ctxmngrs import timer |
|  | from decorators import print\_result |
|  | from gens import field, gen\_random |
|  | from iterators import Unique |
|  |  |
|  | path = "data\_light\_cp1251.json" |
|  |  |
|  | with open(path, encoding="ISO-8859-1") as f: |
|  | data = json.load(f) |
|  |  |
|  |  |
|  | @print\_result |
|  | def f1(arg): |
|  | return sorted((x for x in Unique(list(field(arg, "job-name")), ignore\_case=True))) |
|  |  |
|  |  |
|  | @print\_result |
|  | def f2(arg): |
|  | return list(filter(lambda x: x[0:11] == "Ïðîãðàììèñò", arg)) |
|  |  |
|  |  |
|  | @print\_result |
|  | def f3(arg): |
|  | return list(map(lambda x: x + " с опытом Python", arg)) |
|  |  |
|  |  |
|  | @print\_result |
|  | def f4(arg): |
|  | salaries = list(gen\_random(100000, 200000, len(arg))) |
|  | for name, salary in zip(arg, salaries): |
|  | print(name, ", зарплата ", salary) |
|  |  |
|  |  |
|  | with timer(): |
|  | f4(f3(f2(f1(data)))) |