**Код**

from operator import itemgetter

class Driver:

"""Водитель"""

def \_\_init\_\_(self, id, name, sal, CarPark\_id):

self.id = id

self.name = name

self.sal = sal

self.CarPark\_id = CarPark\_id

class CarPark:

"""Автопарк"""

def \_\_init\_\_(self, id, name):

self.id = id

self.name = name

class DriverCarPark:

def \_\_init\_\_(self, park\_id, driver\_id):

self.park\_id = park\_id

self.driver\_id = driver\_id

car\_parks = [

CarPark(1, 'Mercedes'),

CarPark(2, 'BMW'),

CarPark(3, 'Audi'),

CarPark(4, 'Porsche'),

CarPark(5, 'Hyundai'),

CarPark(6, 'KIA'),

]

drivers = [

Driver(1, 'Саргсян', 100000, 1),

Driver(2, 'Иванов', 130000, 6),

Driver(3, 'Сомов', 100000, 5),

Driver(4, 'Петренко', 75000, 4),

Driver(5, 'Зеленский', 60000, 3),

Driver(6, 'Пивоваров', 150000, 2),

Driver(7, 'Леонов', 95000, 5),

Driver(8, 'Матвеев', 102000, 1),

Driver(9, 'Гутова', 120000, 2),

]

drivers\_cars = [

DriverCarPark(1, 1),

DriverCarPark(6, 2),

DriverCarPark(3, 3),

DriverCarPark(5, 4),

DriverCarPark(2, 5),

DriverCarPark(6, 6),

DriverCarPark(7, 9),

DriverCarPark(8, 7),

DriverCarPark(9, 9)

]

def main():

one\_to\_many = [

(c.name, c.sal, d.name)

for d in car\_parks

for c in drivers

if c.CarPark\_id == d.id

]

many\_to\_many\_temp = [

(d.name, cl.CarPark\_id, cl.id)

for d in car\_parks

for cl in drivers

if d.id == cl.CarPark\_id

]

many\_to\_many = [

(c.name, car\_parks\_name)

for car\_parks\_name, car\_parks\_id, drivers\_id in many\_to\_many\_temp

for c in drivers

if c.id == drivers\_id

]

print('Задание Б1')

res\_1 = sorted(one\_to\_many, key=itemgetter(0))

for i in res\_1:

print(i, end="\n")

print('\nЗадание Б2')

res\_2\_unsorted = []

for b in car\_parks:

d\_driver = list(filter(lambda i: i[2] == b.name, one\_to\_many))

res\_2\_unsorted.append((b.name, len(d\_driver)))

res\_2 = sorted(res\_2\_unsorted, key=itemgetter(1), reverse=True)

print(res\_2)

print('\nЗадание Б3')

res\_3 = {}

for d in drivers:

if str(d.name).endswith('ов'):

d\_Drivers = list(filter(lambda i: i[0] == d.name, many\_to\_many))

d\_Drivers\_names = [x for \_, x in d\_Drivers]

res\_3[d.name] = d\_Drivers\_names

print(res\_3)

if \_\_name\_\_ == '\_\_main\_\_':

main()

C:\Lab\_Python\Lab\_Python\RK1\venv\Scripts\python.exe C:/Lab\_Python/Lab\_Python/RK1/RK1.py

Задание Д1

(‘Гутова’, 120000, ‘BMW’)

(‘Зеленский’, 60000, ‘Audi’)

(‘Иванов’, 130000, ‘Kia’)

(‘Леонов’, 95000, ‘Hyundai’)

(‘Матвеев’, 102000, ‘Mercedes’)

(‘Петренко’, 75000, ‘Porsche’)

(‘Пивоваров’, 150000, ‘BMW’)

(‘Саргсян’, 100000, ‘Mercedes’)

(‘Сомов’, 100000, ‘Hyundai’)

Задание Д2

[('Mercedes, 2), ('BMW’,2), (' Hyundai’, 2), (' Audi’, 1),(' Porsche’, 1), (' Kia’, 1)]

Задание Д3

{‘Иванов’ : [' Kia’], ‘Сомов’ : [' Hyundai’], ‘Пивоваров’ : [ ‘BMW’] }

Process finished with exit code 0

Изображение выглядит как текст

Автоматически созданное описание