Лабораторная работа №1

Задачи.

Ссылка на Replite: https://replit.com/@letablohina2017/Practice

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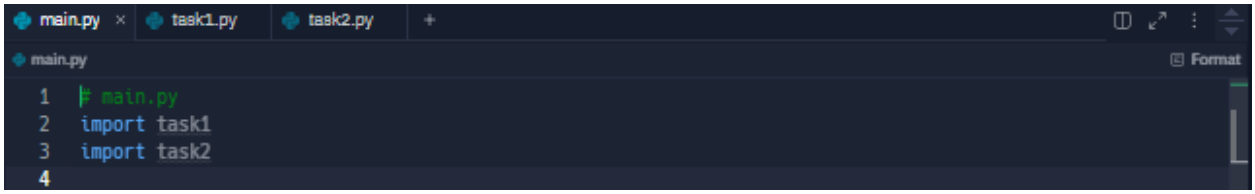
Задание 1

```
C:\Users\79112>pip

Usage:
  pip <command> [options]

Commands:
  install                     Install packages.
  download                    Download packages.
  uninstall                   Uninstall packages.
  freeze                      Output installed packages in requirements format.
  inspect                     Inspect the python environment.
  list                        List installed packages.
  show                        Show information about installed packages.
  check                       Verify installed packages have compatible dependencies.
  config                      Manage local and global configuration.
  search                      Search PyPI for packages.
  cache                       Inspect and manage pip's wheel cache.
  index                       Inspect information available from package indexes.
  wheel                       Build wheels from your requirements.
  hash                        Compute hashes of package archives.
  completion                  A helper command used for command completion.
  debug                       Show information useful for debugging.
  help                        Show help for commands.

General Options:
  -h, --help                  Show help.
  --debug                     Let unhandled exceptions propagate outside the main subroutine, instead of logging them
```

Для одновременного выполнений программ в Replite был сделаны 2 файлы и далее они импортированы в главный файл. Поэтому при отсутствии ошибок в работе калькулятора (1 задание), программа выводит сразу требования ввести число для 2 программы (2 задание)

Задание 3.1



main.py | task1.py | task2.py

task1.py > ...

```python
"""Calculates the result of the calculator

 Arguments:
    a (int, float): The first number.
    b (int, float): The second number.
    operation (str): The operation to be performed.
        - 'add' for addition,
        - 'sub' for subtraction,
        - 'div' for division,
        - 'mult' for multiplication.

    Returns:
    int, float: The result of the operation.

    Exceptions:
    ValueError: If the division operation and the second number is zero.
    """
def calculate(a, b, operation):
      if operation == 'add':
        return a + b
      if operation == 'sub':
        return a - b
      if operation == 'div':
        if b == 0:
            raise ValueError("Division is not possible")
        return a / b
      if operation == 'mult':
        return a * b

def test_add():
    assert calculate(1, 2, 'add') == 3
def test_sub():
    assert calculate(8, 6, 'sub') == 2
def test_div():
    assert calculate(64, 8, 'div') == 8
def test_mult():
    assert calculate(6, 9, 'mult') == 54

test_add()
test_sub()
test_mult()
test_div()
```

Задание 3.2