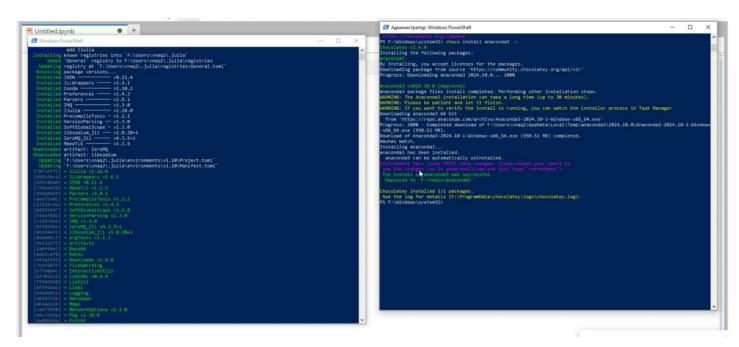
Лабораторная работа N°1

по дисциплине Компьютерный практикум по статическому анализу данных



```
[11]: 2+3
[11]: 5
[12]: 4+5
[12]: 9
[13]: 1+99
```

```
[15]: ;whoami

desktop-10071a4\vnaq2

[]:
```

```
[18]: typeof("1")
[18]: String
[19]: typeof(3)
[19]: Int64
[20]: typeof(false)
[20]: Bool
```

```
[16]: for T in
          [Int8,Int16,Int32,Int64,Int128,UInt8,UInt16,UInt32,UInt64,UInt128]
          println("$(lpad(T,7)): [$(typemin(T)),$(typemax(T))]")
      end
         Int8: [-128,127]
        Int16: [-32768,32767]
        Int32: [-2147483648,2147483647]
        Int64: [-9223372036854775808,9223372036854775807]
       Int128: [-170141183460469231731687303715884105728,170141183460469231731687303715884105727]
        UInt8: [0,255]
       UInt16: [0,65535]
       UInt32: [0,4294967295]
       UInt64: [0,18446744073709551615]
      UInt128: [0,340282366920938463463374607431768211455]
    [21]: function f(x)
               x^2
           end
           f(4)
    [21]: 16
    [22]: g(x)=x^2
    [22]: g (generic function with 1 method)
    [23]: a = [476]
           b = [1, 2, 3]
           a[2], b[2]
    [23]: (7, 2)
```

Read()

```
file = open("1.txt", "r")
content = read(file, String)
close(file)
println("Содержимое: $content")
```

Readline()

```
file = open("1.txt", "r")
line = readline(file)
close(file)
println("Первая строка: $line")
```

Readlines()

```
[]: lines = readlines("1.txt")
println("Maccum: ", lines)
```

Readdlm()

```
[ ]: data = readdlm("data.csv", ', )
```

Print() и Println()

```
[27]: print("Привет")
println(", Ваня")
Привет, Ваня
```

Write()

```
[]: write("1_out.txt", "privet")
```

Пример работы с parse()

```
num = parse(Int, "123")
println("Число: $num")
Число: 123
```

Математические действия

```
[29]: x = 10
y = 20
println(x*y)
```

Работа с матрицами и скалярное произведение:

```
[31]: A = [1 2; 3 4]
       B = [4 \ 3; \ 2 \ 1]
       println("Сложение матриц: ", A + B)
       Сложение матриц: [5 5; 5 5]
[32]: A = [1 2; 3 4]
       println("Транспонирование: ", A')
       Транспонирование: [1 3; 2 4]
[33]: v1 = [1, 2, 3]
      v2 = [4, 5, 6]
       println("Скалярное произведение: ", dot(v1, v2))
[35]: A = [1 2; 3 4]
      B = [5 6; 7 8]
      println("Умножение: ", A * B)
      Умножение: [19 22; 43 50]
```