

Отчет №4
по дисциплине “Основы программной инженерии”
Группа: ПИЖ-б-о-20-1, Примаков В. Д

ВЫПОЛНЕНИЕ

1 История коммитов в главной ветке:

```
surai5a@surai5a-pc:~/Учеба/лаба4$ git log
commit 1784b3dcf59fd3e7c3300e0a21193a76294245c (HEAD -> FSE, origin/HEAD,
origin/FSE)
Author: Surai5a <vadym.prymary@gmail.com>
Date: Sun Oct 10 20:37:02 2021 +0300

    Squashed commit of the following:

    commit 22967f7e2b1bc671ea2c9a19ae874ebe7296383c
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 20:22:52 2021 +0300

        added individual_hard.py

    commit 75d9a3c8de8055dd5828a4f902f4469112b956e6
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 17:27:31 2021 +0300

        added individual.py and numbers.py

    commit 72e1df414175a8a646f226f44d5f3076b829aea4
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 16:30:28 2021 +0300

:...skipping...
```

```
commit 1784b3dcf59fd3e7c3300e0a21193a76294245c (HEAD -> FSE, origin/HEAD,
origin/FSE)
Author: Surai5a <vadym.prymary@gmail.com>
Date: Sun Oct 10 20:37:02 2021 +0300

    Squashed commit of the following:

    commit 22967f7e2b1bc671ea2c9a19ae874ebe7296383c
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 20:22:52 2021 +0300

        added individual_hard.py

    commit 75d9a3c8de8055dd5828a4f902f4469112b956e6
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 17:27:31 2021 +0300

        added individual.py and numbers.py

    commit 72e1df414175a8a646f226f44d5f3076b829aea4
    Author: Surai5a <vadym.prymary@gmail.com>
    Date: Sun Oct 10 16:30:28 2021 +0300

        Added user.py and arithmetic.py

commit 5777288c3a145cfe57a77d857ead55ffb7852096
Author: Surai5a <vadym.prymary@gmail.com>
Date: Sun Oct 10 15:47:45 2021 +0300

    Create .gitignore

    .gitignore for pycharm

commit 43f1de2ce7125b7d436aef44201c6bd577347c21
Author: Surai5a <vadym.prymary@gmail.com>
Date: Sun Oct 10 15:34:38 2021 +0300
```

2 Проект PyCharm: 2.a user.py

Отчет №4
по дисциплине “Основы программной инженерии”
Группа: ПИЖ-б-о-20-1, Примаков В. Д

```
user.py
1 name = input("Your name is: ")
2 age = int(input("Your age: "))
3 livingPlace = input("Where you live: ")
4 print("This is %s\nIt is %d\n(S)he live in %s" % (name, age, livingPlace))

user
/home/surai5a/Yche6a/laba4/pyProj/venv/bin/python /home/surai5a/Yche6a/laba4/pyProj/user.py
Your name is: Vadim
Your age: 18
Where you live: Kamchatka
This is Vadim
It is 18
(S)he live in Kamchatka
```

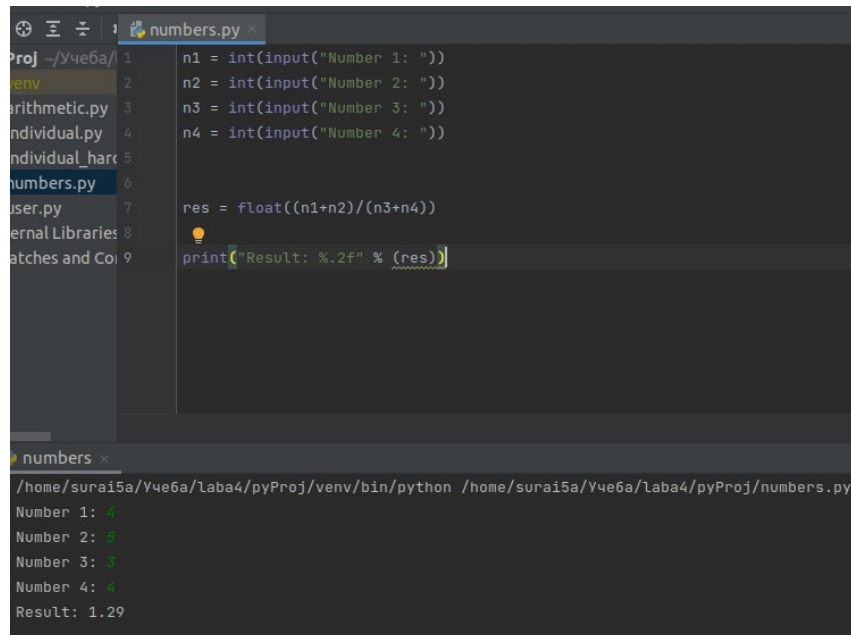
2.barithphmetic.py

```
arithmetic.py
1 rightAns = int(4*100-54)
2 print("Can YOU solve this:\n4 * 100 -54")
3 userAns = int(input("Write your answer there: "))
4 if userAns == rightAns:
5     print("Your answer is absolutely right! Right answer is %d" % (rightAns))
6 else:
7     print("You was wrong :(\nThe right answer is %d\nYour answer is %d" % (rightAns, userAns))

arithmetic
/home/surai5a/Yche6a/laba4/pyProj/venv/bin/python /home/surai5a/Yche6a/laba4/pyProj/arithmetic.py
Can YOU solve this:
4 * 100 -54
Write your answer there: 346
Your answer is absolutely right! Right answer is 346
```

2.c numbers.py

Отчет №4
по дисциплине “Основы программной инженерии”
Группа: ПИЖ-б-о-20-1, Примаков В. Д



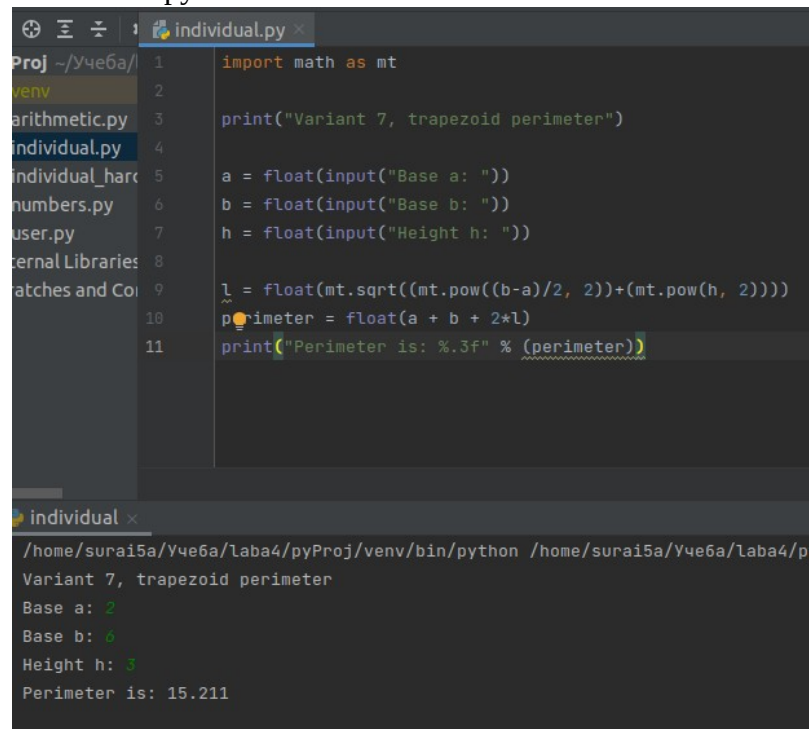
The screenshot shows a code editor with a file named `numbers.py` open. The code in the file is as follows:

```
1 n1 = int(input("Number 1: "))
2 n2 = int(input("Number 2: "))
3 n3 = int(input("Number 3: "))
4 n4 = int(input("Number 4: "))
5
6
7 res = float((n1+n2)/(n3+n4))
8
9 print("Result: %.2f" % (res))
```

The terminal output below the code shows the execution of the program:

```
Number 1: 4
Number 2: 5
Number 3: 3
Number 4: 4
Result: 1.29
```

2.d individual.py



The screenshot shows a code editor with a file named `individual.py` open. The code in the file is as follows:

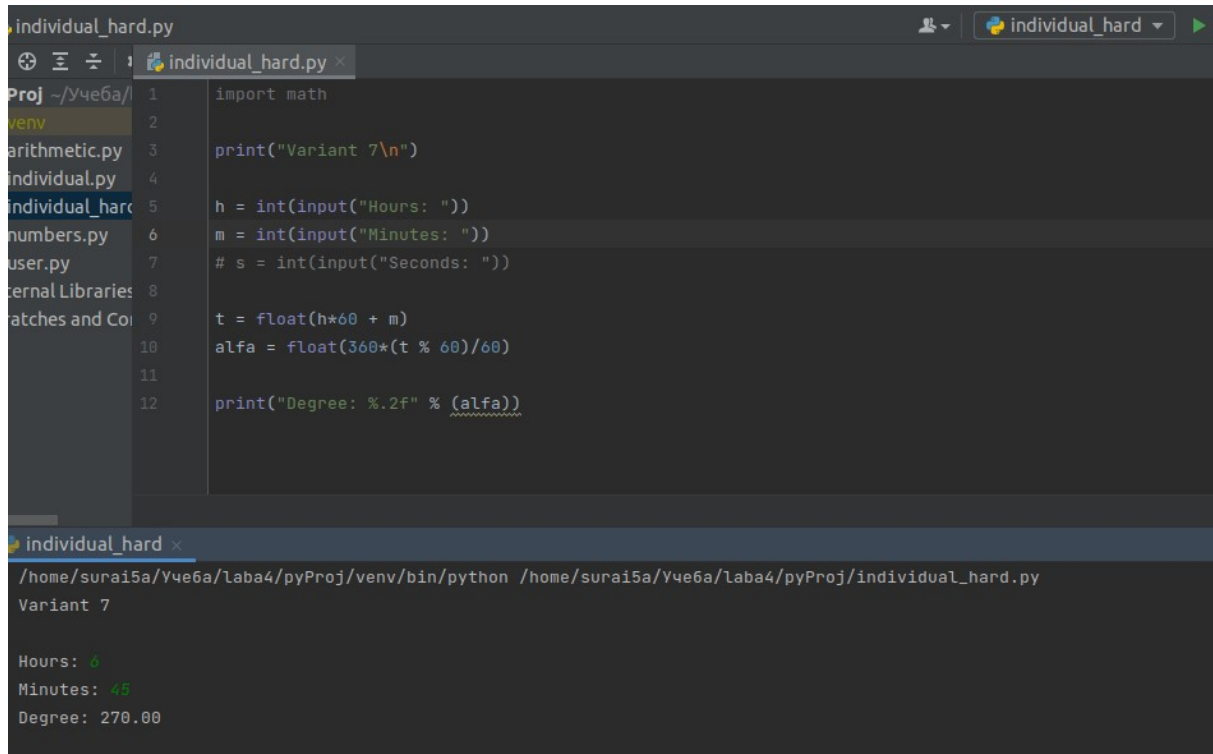
```
1 import math as mt
2
3 print("Variant 7, trapezoid perimeter")
4
5 a = float(input("Base a: "))
6 b = float(input("Base b: "))
7 h = float(input("Height h: "))
8
9 l = float(mt.sqrt((mt.pow((b-a)/2, 2))+(mt.pow(h, 2))))
10 perimeter = float(a + b + 2*l)
11 print("Perimeter is: %.3f" % (perimeter))
```

The terminal output below the code shows the execution of the program:

```
Variant 7, trapezoid perimeter
Base a: 2
Base b: 6
Height h: 3
Perimeter is: 15.211
```

2.e individual_hard.py

Отчет №4
по дисциплине “Основы программной инженерии”
Группа: ПИЖ-б-о-20-1, Примаков В. Д



```
individual_hard.py
1 import math
2
3 print("Variant 7\n")
4
5 h = int(input("Hours: "))
6 m = int(input("Minutes: "))
7 # s = int(input("Seconds: "))
8
9 t = float(h*60 + m)
10 alfa = float(360*(t % 60)/60)
11
12 print("Degree: %.2f" % (alfa))
```

individual_hard x

```
/home/surai5a/yche6a/laba4/pyProj/venv/bin/python /home/surai5a/yche6a/laba4/pyProj/individual_hard.py
Variant 7

Hours: 6
Minutes: 45
Degree: 270.00
```

3 Задания:

7. Даны основания и высота равнобедренной трапеции. Найти периметр трапеции.
7. Часовая стрелка образует угол y с лучом, проходящим через центр и через точку, соответствующую 12 часам на циферблате, $0 < y \leq 2\pi$. Определить значение угла для минутной стрелки, а также количество полных часов и полных минут.

Ссылки на репозитории

GitHub - <https://github.com/surai5a/laba4>