

### №0.1

```
File Edit Format Run Options Window Help
for i in range(-3,4):
    print(i,end=' ')
print()
for i in range(17,2,-2):
    print(i,end=' ')
print()
out = 2
for i in range(1,7):
    out *= 2
    print(out,end=' ')
print()
out = 243
print(out,end=' ')
for i in range(1,6):
    out /= 3
    print(out,end=' ')
```

### Python 3.7.4 Shell

```
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/vil/0.py =====
-3 -2 -1 0 1 2 3
17 15 13 11 9 7 5 3
4 8 16 32 64 128
243 81.0 27.0 9.0 3.0 1.0
>>> |
```

### №1

### 1.py - C:/vil/1.py (3.7.4)

```
File Edit Format Run Options Window Help
suma = 0
for i in range(13,32):
    if (i%1) == 0:
        suma += i
print(suma)
```

```
|
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=====
RESTART: C:\vil\1.py =====
418
>>> |
```

№2

2.py - C:/vil/2.py (3.7.4)

File Edit Format Run Options Window Help

```
col = {2,5,1,7,3,9,6}
dob = 1
for i in col:
    dob *= i
print(dob)
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

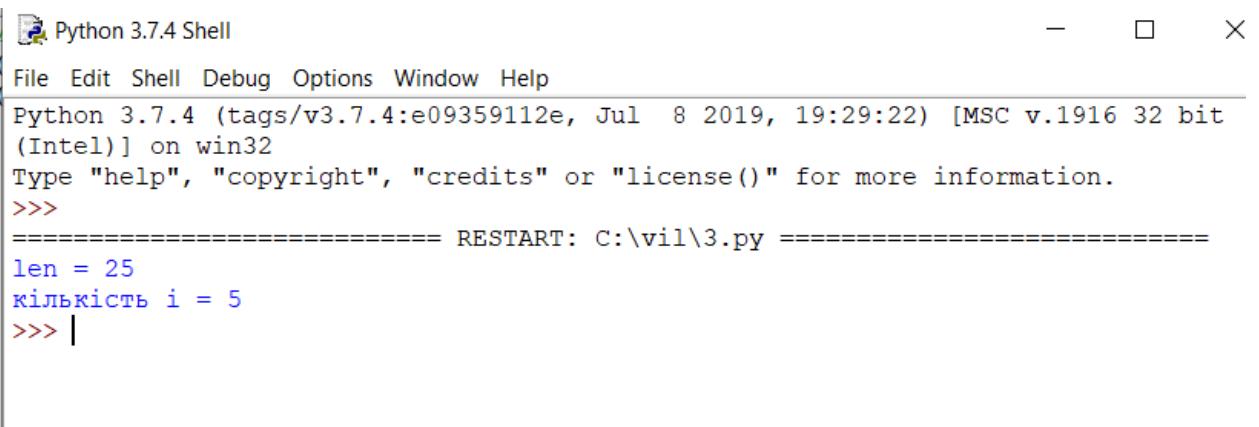
```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=====
RESTART: C:\vil\2.py =====
11340
>>> |
```

№3

3.py - C:/vil/3.py (3.7.4)

File Edit Format Run Options Window Help

```
s = "мінімальна кількість слів"
print("len =",len(s))
print("кількість і =",len(s.split("і"))-1)
```



Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

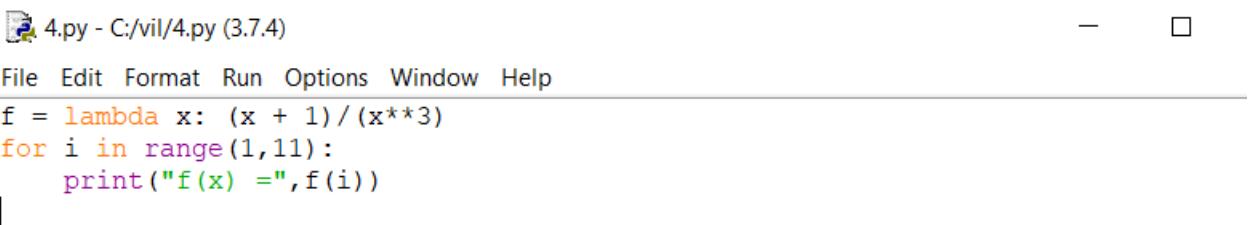
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

```
>>> ===== RESTART: C:\vil\3.py =====
```

```
len = 25
кількість і = 5
>>> |
```

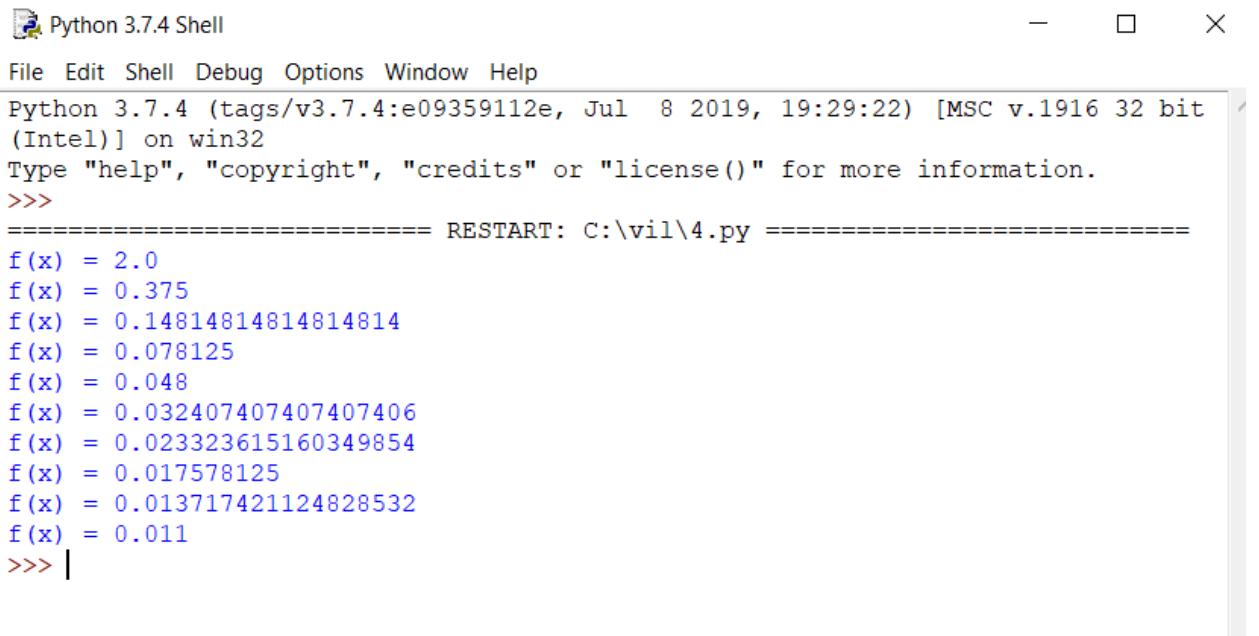
№4



4.py - C:/vil/4.py (3.7.4)

File Edit Format Run Options Window Help

```
f = lambda x: (x + 1) / (x**3)
for i in range(1,11):
    print("f(x) =",f(i))
```



Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

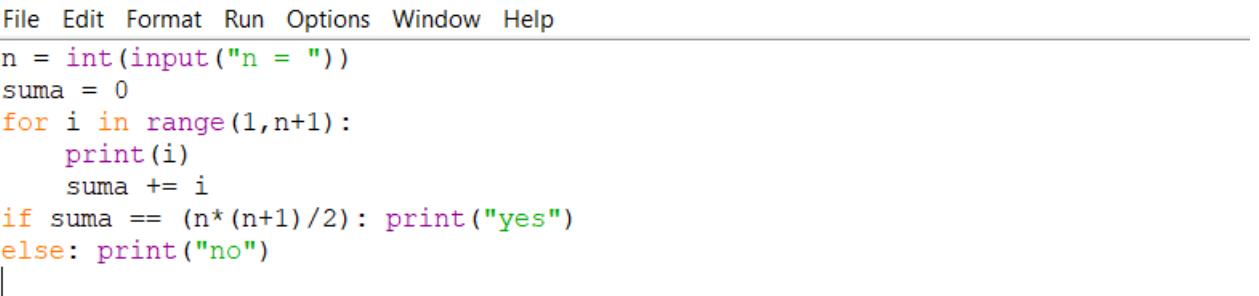
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

```
>>> ===== RESTART: C:\vil\4.py =====
```

```
f(x) = 2.0
f(x) = 0.375
f(x) = 0.14814814814814814
f(x) = 0.078125
f(x) = 0.048
f(x) = 0.032407407407407406
f(x) = 0.023323615160349854
f(x) = 0.017578125
f(x) = 0.013717421124828532
f(x) = 0.011
>>> |
```

№5



File Edit Format Run Options Window Help

```
n = int(input("n = "))
suma = 0
for i in range(1,n+1):
    print(i)
    suma += i
if suma == (n*(n+1)/2): print("yes")
else: print("no")
```



Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=====
RESTART: C:\vil\5.py =====
n = 2
1
2
yes
>>>
```

№6

### 6.py - C:/vil/6.py (3.7.4)

```
File Edit Format Run Options Window Help
f = 6
q = 0.5
prog = []
for i in range(1,5):
    if (f * q ** (i - 1)) >= 0.6:
        prog.append(f * q ** (i - 1))

print(prog)
print("S =", f * (1-q**len(prog))/(1-q))
|
```

### Python 3.7.4 Shell

```
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/vil/6.py =====
[6.0, 3.0, 1.5, 0.75]
S = 11.25
>>>
```