```
[3]:  print(123)
      print(98.6)
      print('hello world')

      123
      98.6
      hello world

[7]:  x1q3z9ocd = 35.0
      x1q3z9afd = 12.50
      x1q3z9afd = x1q3z9ocd * x1q3z9afd
      print(x1q3z9afd)
      print(x1q3z9ocd)

      437.5
      35.0
```

```
[13]: x=1+2*3-4/5**6
      print(x)

      6.999744

[15]: x=1+2**3/4*5
      print(x)

      11.0

[17]: ddd=1+4
      print(ddd)
      eee='hello'+'there'
      print(eee)

      5
      hellothere

[23]: type(1)
      type('hello')

[23]: str
```
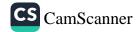
```
[51]:  #varible name
       x=20
       #expression evaluation
       x=30+x
       #all done
       print('now answer is',x)#print statement

       now answer is 50
```

```
[77]:  x=input('hours:')
       y=input('rate')
       pay=int(x)*float(y)
       print('pay is:',pay)
       #y=input('rate:')
       #pay=x*y
```

```
       hours: 35
       rate 2.75
       pay is: 96.25
```

```
[82]:  x=5
       if x<10:
           print('smaller')
       if x>20:
           print('bigger')
       print('finish')
```

smaller
finish

[84]:
```python
x=5
if x==5:
    print('equals 5')
if x>4:
    print('greater than 4')
if x>=5:
    print('greater than or equal 5')
if x<6:
    print('less than 6')
if x<=5:
    print('less than or equal to 5')
if x!=6:
    print('not equal to 6')
```

```
equals 5
greater than 4
greater than or equal 5
less than 6
less than or equal to 5
not equal to 6
```
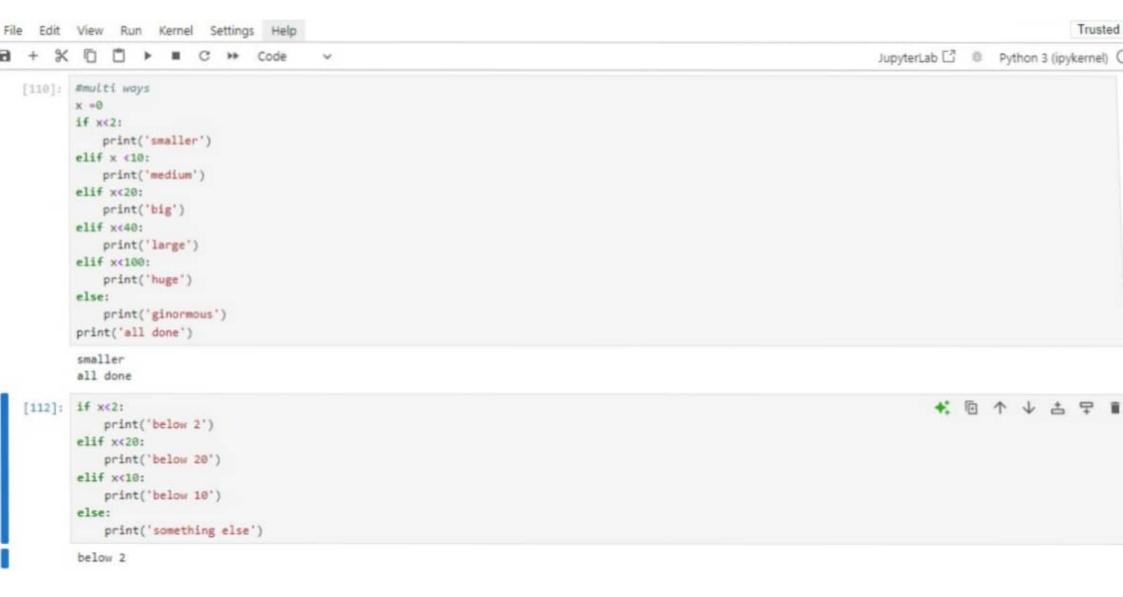
```
print('afterwards 5')
print('before 6')
if x==6:
    print('is 6')
    print('is still 6')
    print('third 6')
print('afterwards 6')
```

```
before 5
is 5
is still 5
third 5
afterwards 5
before 6
afterwards 6
```

[93]:
```
x=5
if x>2:
    print('bigger than 2')
    print('still bigger')
print('done with 2')
for i in range(5):
    print (i)
    if i>2:
        print('bigger than 2')
    print('done with i',i)
print('all done')
```

```
bigger than 2
still bigger
```

```
0
done with i 0
1
done with i 1
2
done with i 2
3
bigger than 2
done with i 3
4
bigger than 2
done with i 4
all done
```

[96]:
```python
x=42
if x >1:
    print('more than one')
    if x<100:
        print('less than 100')
print('all done')
```

```
more than one
less than 100
all done
```

```
[110]: #multi ways
       x =0
       if x<2:
           print('smaller')
       elif x <10:
           print('medium')
       elif x<20:
           print('big')
       elif x<40:
           print('large')
       elif x<100:
           print('huge')
       else:
           print('ginormous')
       print('all done')
```

```
smaller
all done
```

```
[112]: if x<2:
           print('below 2')
       elif x<20:
           print('below 20')
       elif x<10:
           print('below 10')
       else:
           print('something else')
```

```
below 2
```

```
[120]: #cat notry.py
astr = 'hello bob'
try:
    istr= int(astr)
except:
    istr=-1
print('First',istr)
astr ='123'
try:
    istr =int(astr)
except:
    istr=-1
print('second',istr)

First -1
second 123
```

```
        print( chere )
except:
    istr=-1
print('done',istr)
```

```
hello
done -1
```

```
[150]: rawstr=input('enter a number:')
try:
    ival=int(rawstr)
except:
    ival=-1
#print('rawstr',ival)
if ival > 0:
    print('nice work')
else:
    print('not a number')
```

```
enter a number: ty
not a number
```

```
[152]: x=45
rate=10
y=x*rate
print(y)
```
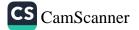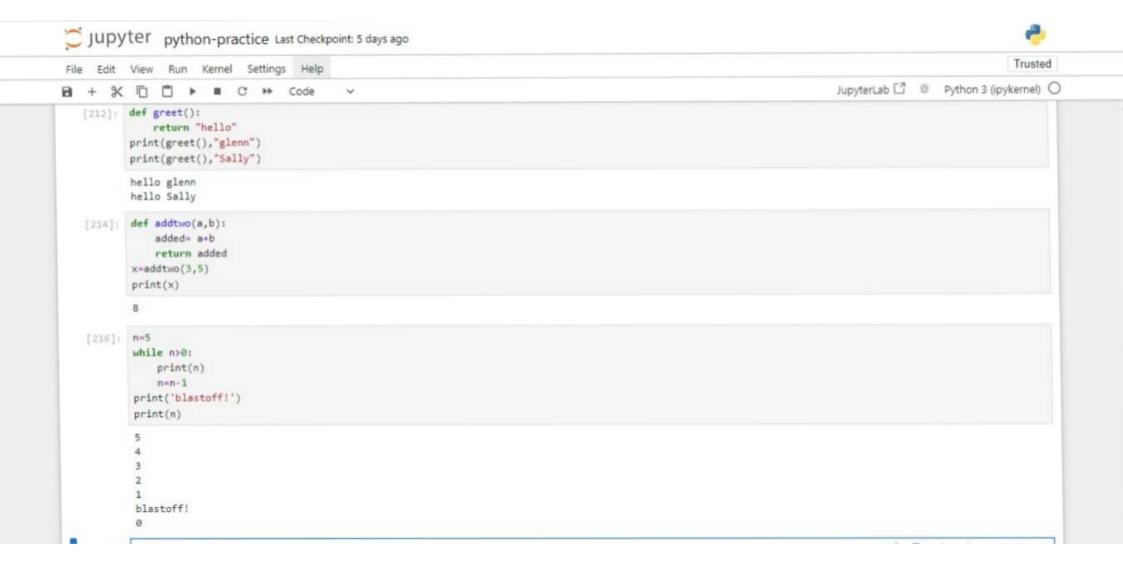
```
450
```

```
[176]: big=max('hello world')
       print(big)
       tiny=min('hello world')
       print(tiny)
```

```
w
```

```
[180]: print(float(99)/100)
       i=42
       type(i)
```

```
0.99
```

```
[180]: int
```

```
[202]: i=print(1+2*float(3)/4-5)
```

```
-2.5
```

```
[204]: x=5
       print('hello')
       def print_lyrics():
           print("I'm a lumberjack, and I'm okay")
           print('I sleep all night and I work all day.')
       print('yo')
       print_lyrics()
       x=x+2
       print(x)
```

-2.5

[204]:
```python
x=5
print('hello')
def print_lyrics():
    print("I'm a lumberjack, and I'm okay")
    print('I sleep all night and I work all day.')
print('yo')
print_lyrics()
x=x+2
print(x)
```

```
hello
yo
I'm a lumberjack, and I'm okay
I sleep all night and I work all day.
7
```

[208]:
```python
def greet(lang):
    if lang =='es':
        print('hola')
    elif lang == 'fr':
        print('Bonjour')
    else:
        print('hello')
greet('en')
#hello
greet('es')
```

```
[212]:  def greet():
            return "hello"
        print(greet(),"glenn")
        print(greet(),"Sally")
```

```
hello glenn
hello Sally
```

```
[214]:  def addtwo(a,b):
            added= a+b
            return added
        x=addtwo(3,5)
        print(x)
```

```
8
```

```
[216]:  n=5
        while n>0:
            print(n)
            n=n-1
        print('blastoff!')
        print(n)
```

```
5
4
3
2
1
blastoff!
0
```

```
1
blastoff!
0
```

```
n=5
while n>0:
    print('lather')
    print('rinse')
print('Dry off!')
```

```
lather
rinse
lather
rinse
lather
rinse
lather
rinse
lather
rinse
lather
rinse
lather
rinse
lather
rinse
lather
rinse
```