In [16]:

```
#Min
book = 80
pen = 15
pencil = 5
beg = 100
pencilcase = 20
min(book, pen, pencil, beg, pencilcase)
```

5

In [15]:

```
#Max
max(book, pen, pencil, beg, pencilcase)
```

Out[15]:

100

In [24]:

```
#sorting
school_list = [12, 50, 60, 30, 5, 70, 100]
sortedschool_list = sorted(school_list)
sortedschool_list
```

Out[24]:

[5, 12, 30, 50, 60, 70, 100]

In [26]:

```
#reverse sorting
reversedschool_list = sorted(school_list, reverse=True)
reversedschool_list
```

Out[26]:

[100, 70, 60, 50, 30, 12, 5]

In [27]:

```
#absolute
abs(-10)
```

Out[27]:

10

In [28]:

```
abs(-17*14)
```

Out[28]:

238

In [30]:

```
abs(2+4j)
```

Out[30]:

4.47213595499958

In [38]:

```
class nums:
  x = 20
  y = 2
  z = -5

delattr(nums, 'z')
rno = nums()

print('x = ',rno.x)
print('y = ',rno.y)
```

```
x =  20
y =  2
```

In [51]:

```
int_val = 10
string_val = 'Python is for everyone'
float_val = 15.31

print(hash(int_val))
print(hash(string_val))
print(hash(float_val))
```

```
10
9051883745176546434
714811332856246287
```

In [53]:

```
tuple_val = (1, 2, 3, 4, 5)

# list are mutable
list_val = [1, 2, 3, 4, 5]

print (hash(tuple_val))
#list is unhashable
```

```
8315274433719620810
```

In [66]:

```
#set
# empty set
print(set())

# from string
print(set('Python is for everyone'))

# from tuple
print(set(('v', 'o', 'w', 'e', 'l', 'a', 'e', 'i', 'o', 'u')))

# from list
print(set(['v', 'o', 'w', 'e', 'l', 'a', 'e', 'i', 'o', 'u']))

# from range
print(set(range(8)))
```

```
set()
{'e', 'i', 'P', ' ', 'f', 'r', 'n', 'o', 'h', 'v', 'y', 't', 's'}
{'e', 'i', 'l', 'a', 'o', 'v', 'u', 'w'}
{'e', 'i', 'l', 'a', 'o', 'v', 'u', 'w'}
{0, 1, 2, 3, 4, 5, 6, 7}
```

In [71]:

```
#The all() function returns True if all items in an iterable are true, otherwise it returns False
```

```
#The all() function returns True if all items in an iterable are true, otherwise it returns False.

list = [0, 1, 1, 1]
x = all(list)
x
```

Out[71]:

False

In [74]:

```
set = {0, 1, 0, 1}
x = all(set)
x
```

Out[74]:

False

In [ ]:

```

```