```python
In [1]:  a = 5
         b = 8
```

```python
In [2]:  if a > 5 and b < 10:
             print("")
```

```python
In [3]:  not (False)
```
```
Out[3]:  True
```

```python
In [4]:  not (True)
```
```
Out[4]:  False
```

```python
In [5]:  a = 7
```

```python
In [6]:  if a > 7:
             print("a")
```

```python
In [7]:  if not a>7:
             print("a")

         a
```

```python
In [8]:  i = 1
```

```python
In [9]:  i = i + 1
         i += 1
```

```python
In [11]: i = i - 1
         i -= 1
```

```python
In [ ]:  i = i * 2
         i *= 2
```

```python
In [10]: i
```
```
Out[10]: 2
```

```python
In [12]: user_input = input()

         567
```

```python
In [13]: print(user_input)

         567
```

```python
In [14]: type(user_input)
```
```
Out[14]: str
```

```python
In [ ]:  user_input
```

```python
In [15]: number = int(user_input)
```

```python
In [16]: type(number)
```
```
Out[16]: int
```

```python
In [17]: number + 5
```
```
Out[17]: 572
```

```python
In [18]: user_input = input()

         fjsd;fjwi
```

```python
In [19]: number = int(user_input)
```
```
         ---------------------------------------------------------------------------
         ValueError                                Traceback (most recent call last)
         <ipython-input-19-79c9740bb2eb> in <module>
         ----> 1 number = int(user_input)

         ValueError: invalid literal for int() with base 10: 'fjsd;fjwi'
```

```python
In [20]: number = 2.78
```

```python
In [21]: str_number = str(number)
```

```python
In [22]: type(str_number)
```
```
Out[22]: str
```

```python
In [23]: str_number
```
```
Out[23]: '2.78'
```

```python
In [24]: name = "James Bond"
```

```python
In [25]: list(name)
```
```
Out[25]: ['J', 'a', 'm', 'e', 's', ' ', 'B', 'o', 'n', 'd']
```

```python
In [28]: my_list = [1,2,4,5,"hello", True]
         my_list
```
```
Out[28]: [1, 2, 4, 5, 'hello', True]
```

```python
In [27]: str(my_list)
```
```
Out[27]: "[1, 2, 4, 5, 'hello', True]"
```

```python
In [ ]:  int()
         str()
         list()

         float()

         bool()
```

```python
In [29]: user_input = input()

         2.88
```

```python
In [30]: number = int(user_input)
```
```
         ---------------------------------------------------------------------------
         ValueError                                Traceback (most recent call last)
         <ipython-input-30-79c9740bb2eb> in <module>
         ----> 1 number = int(user_input)

         ValueError: invalid literal for int() with base 10: '2.88'
```

```python
In [31]: number = float(user_input)
```

```python
In [32]: number
```
```
Out[32]: 2.88
```

```python
In [33]: type(number)
```
```
Out[33]: float
```

```python
In [42]: number = 4
```

```python
In [43]: bool(number)
```
```
Out[43]: True
```

```python
In [ ]:  my_list = [1,2,3,4,5]
```

```python
In [ ]:
```

```python
In [52]: 10 in range(2,10)
```
```
Out[52]: False
```

```python
In [47]:
```

```python
In [50]: next(m)
```
```
         ---------------------------------------------------------------------------
         TypeError                                 Traceback (most recent call last)
         <ipython-input-50-8efa10874b95> in <module>
         ----> 1 next(m)

         TypeError: 'range' object is not an iterator
```

```python
In [53]: for i in range(2,10):
             print(i)

         2
         3
         4
         5
         6
         7
         8
         9
```

```python
In [54]: name = "My name"
```

```python
In [56]: for i in range(0,len(name)):
             print(name[i])

         M
         y

         n
         a
         m
         e
```

```python
In [55]: for char in name:
             print(char)

         M
         y

         n
         a
         m
         e
```

```python
In [ ]:
```