

```
import numpy as np
```

S01 T01

Variable creation

```
In [58]: x = 5
         y = 8
         z = 'Cristina'
         name = 'David'
```

Basic operations

```
In [59]: print(x * y)
```

40

```
In [60]: sum = x + y
```

```
In [61]: print(sum)
```

13

```
In [62]: while y < 12:
         print(y)
         y = y + 1
```

8
9
10
11

Playing with Strings

```
In [7]: print(z + ' is learning Python')
```

Cristina is learning Python

```
In [8]: print(name + ' is ' + str(sum) + ' years old.')
```

David is 13 years old.

Playing with lists

```
In [9]: menu = ["soup", "seitan", "brownie"]
         for i in menu:
             print(i)
```

soup
seitan
brownie

```
In [10]: print("The menu for today is " + menu[1] + ".")
```

The menu for today is seitan.

Booleans

```
In [63]: print(x > y)
         print(x == y)
         print(x != y)
         print(x < y)
```

False
False
True
True

```
In [64]: if x < y:
         print (str(y) + ' is greater than ' + str(x))
         elif x == y:
             print(str(y) + ' is equal to ' + str(x))
         else:
             print(str(x) + ' is greater than ' + str(y))
```

12 is greater than 5

```
In [65]: if 'soup' in menu:
         print ("true")
         else:
             print("false")
```

true

Dictionaries

```
In [24]: menuDict = {
         "first": "soup",
         "second": "seitan",
         "dessert": "brownie"
         }
```

```
In [31]: print(menuDict["second"])
         print(menuDict.get("first"))
```

seitan
soup

```
In [34]: menuDict['first2'] = "salad"
         print(menuDict)
```

{'first': 'soup', 'second': 'seitan', 'dessert': 'brownie', 'first2': 'salad'}

Functions

```
In [83]: def duplicate (x):
         xDup = x * 2
         return xDup
```

```
In [87]: age = duplicate(x)
         print(age)
```

10

```
In [88]: print(duplicate(y))
```

24

```
In [89]: duplicate(sum)
```

26

Out[89]:

Adding images

```
In [82]: michi = "Michi is a very beautiful cat"
         print(michi + " and he is " + str(age) + " years old.")
```

Michi is a very beautiful cat and he is 10 years old.



In []:

