```
In [4]:   #Understanding variables in Python
          x=2
          y=3
          z=x+y
          print(z)

          5
```

```
In [ ]:   Rules for declaring variables in Python
          =====================================
          Rule 1:A variable name should not contain name spaces in it.
```

```
In [5]:   first name = 'Ami'
          print(First name)
```

```
  File "<ipython-input-5-6a711affa807>", line 1
    first name = 'Ami'
             ^
SyntaxError: invalid syntax
```

```
In [6]:   #correct syntax:
          firstname = 'Ami'
          print(firstname)

          Ami
```

```
In [8]:   first_name = 'Ami'
          print(first_name)

          Ami
```

```
In [ ]:   Rule 2: Variable name should not start with number **
```

```
In [9]:   1name = 'ami'
          print(1name)
          wrong syntax
```

```
  File "<ipython-input-9-7b49bca22900>", line 1
    1name = 'ami'
        ^
SyntaxError: invalid syntax
```

```
In [10]:  #correct syntax
          name1 = 'ami'
          print(name1)

          ami
```

```
In [ ]:   number can appear atlast of variable name
          Rule 3: Variable name should not contain any special characters
          !@#==>avoid using in variable declaration
```

```
In [11]:  name@ = 'ami'
          print(name@)
```

```
  File "<ipython-input-11-ccac378f269c>", line 1
    name@ = 'ami'
        ^
SyntaxError: invalid syntax
```

```
Introduction to datatypes in Python:
====================================
        1.String --> str
        2.Numbers --->integers (int) and floats-->decimals (float)
        3.list --> list
        4.tuples --> tuple
        5.dictionary ---> dict

Note: Python is a case sensitive language

Classification of datatypes:
============================
Two categories: Mutable and immutable datatypes

        1.Mutable datatypes--> which we can edit or alter-->these are flexible in nature
        2.Immutable datatypes --> which we cannot edit or alter --> these are fixed in nature

Introduction to string datatype:
===============================
Definition:String is a series of characters declared in quotes
classification:it is classified as an immutable datatype
How to declare string: 3 approaches
        1.single quotes
        2.double quotes
        3.triple quotes
```

In [12]:
```python
name1 = 'ami'   # Single quotes
print(name1)
```

```
ami
```

In [13]:
```python
name1 = "ami"     #double quotes
print(name1)
```

```
ami
```

In [14]:
```python
name1 = """ami"""   #triple quotes
print(name1)
```

```
ami
```

In [15]:
```python
# is used for commenting the code will not impact execution
```

In [ ]:
```
Introduction to string methods:
===============================
type-->used to validate datatype we are using
```

In [20]:
```python
type(name1)
```

Out[20]: str

In [ ]:

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