Python Dictionary

2

Sets

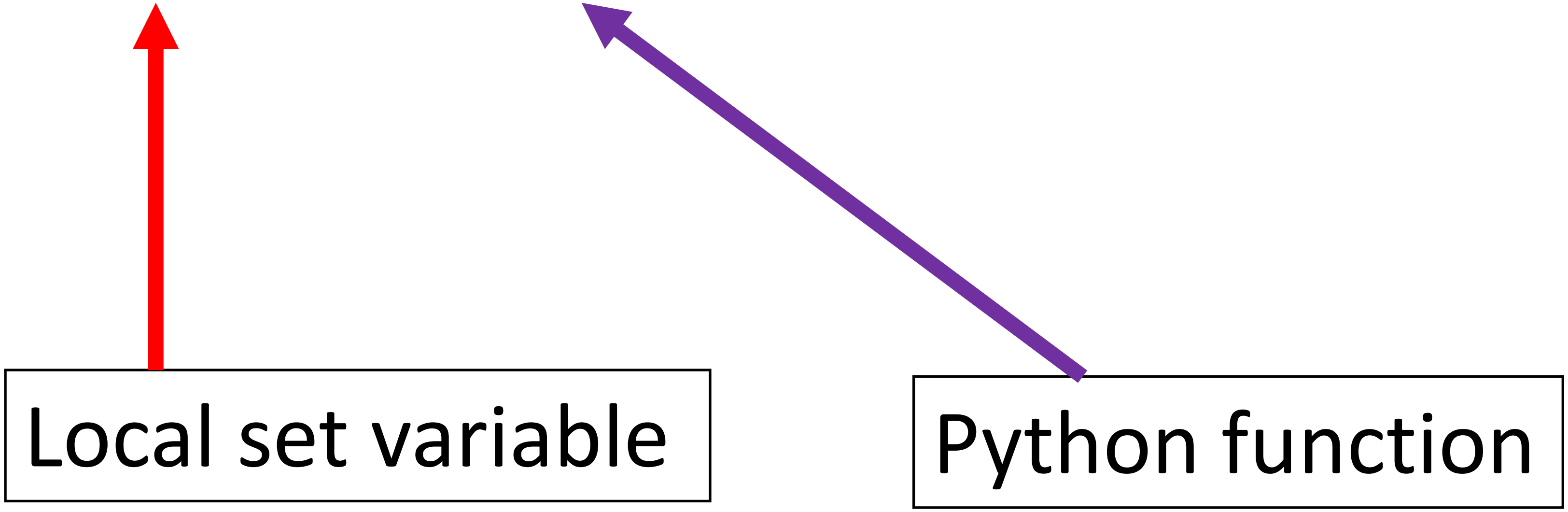
Set contains a collection of unique values and works like a mathematical set

Items of a set

- All elements of the set are unique
- Elements are unordered
- Elements can be mixed data types

Create a Set (empty)

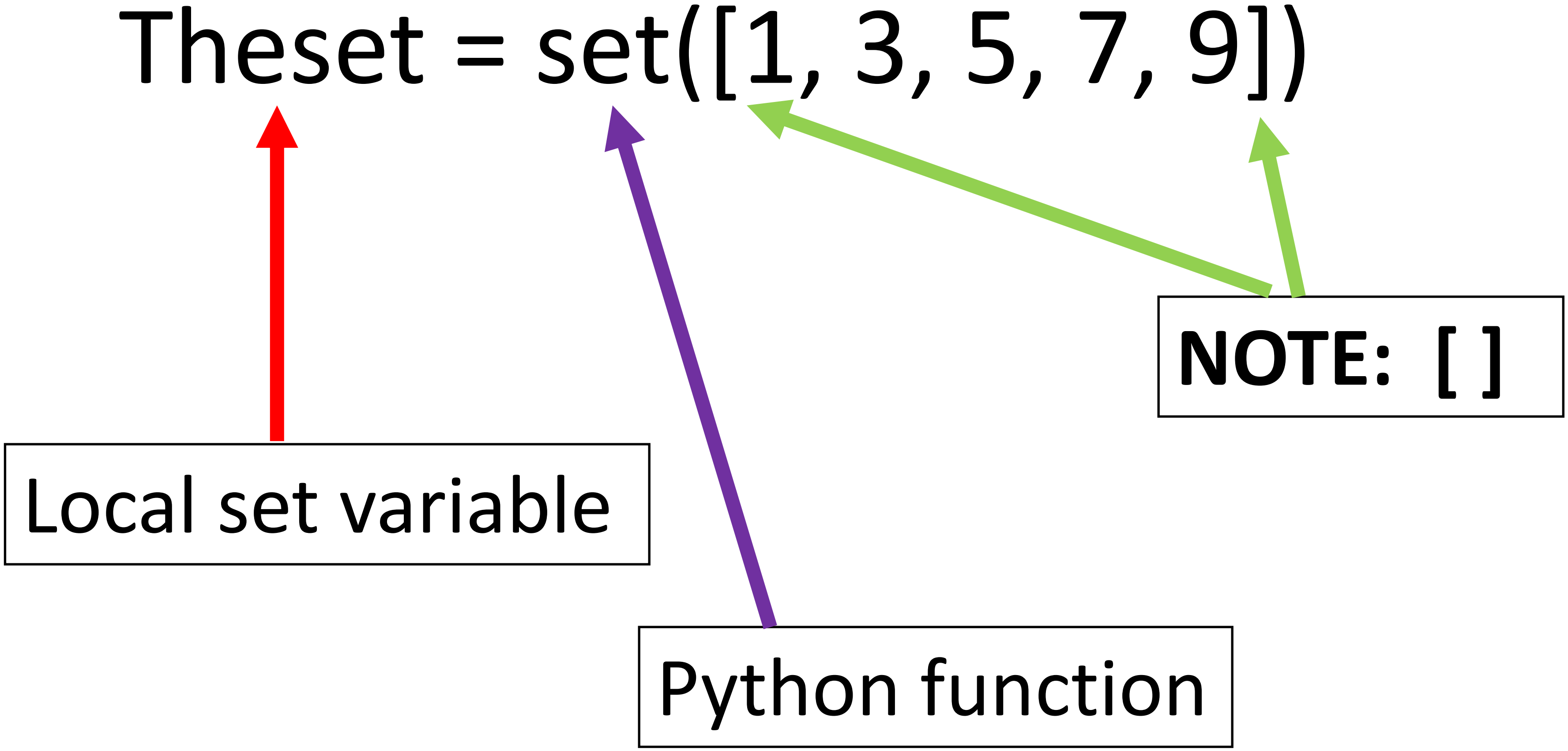
```
Theset = set()
```



Local set variable

Python function

Create a Set (with elements)



```
Theset = set([1, 3, 5, 7, 9])
```

Local set variable

Python function

NOTE: [ ]

sets

Set handling:

- Add, update and delete)
- Len and loops
- (in) and (not in)
- Union, intersection, difference
- Symmetric
- Subsets and supersets

Pickling

Pickling: serializing objects

Convert an object to a stream of data that can be saved to a file

Pickling steps

- Open file for binary writing
- Call the pickle module dump method and write to file
- Close the file

Pickle - output

```
import pickle
set01=set([10, 20,30, 40])
outfile1 = open(‘picklefile.dat’, ’wb’)
pickle.dump(set01,outfile1)
outfile.close()
```

pickle01

Pickle - input

- Open the file as binary
- Call pickle load function
- Close the file

steps

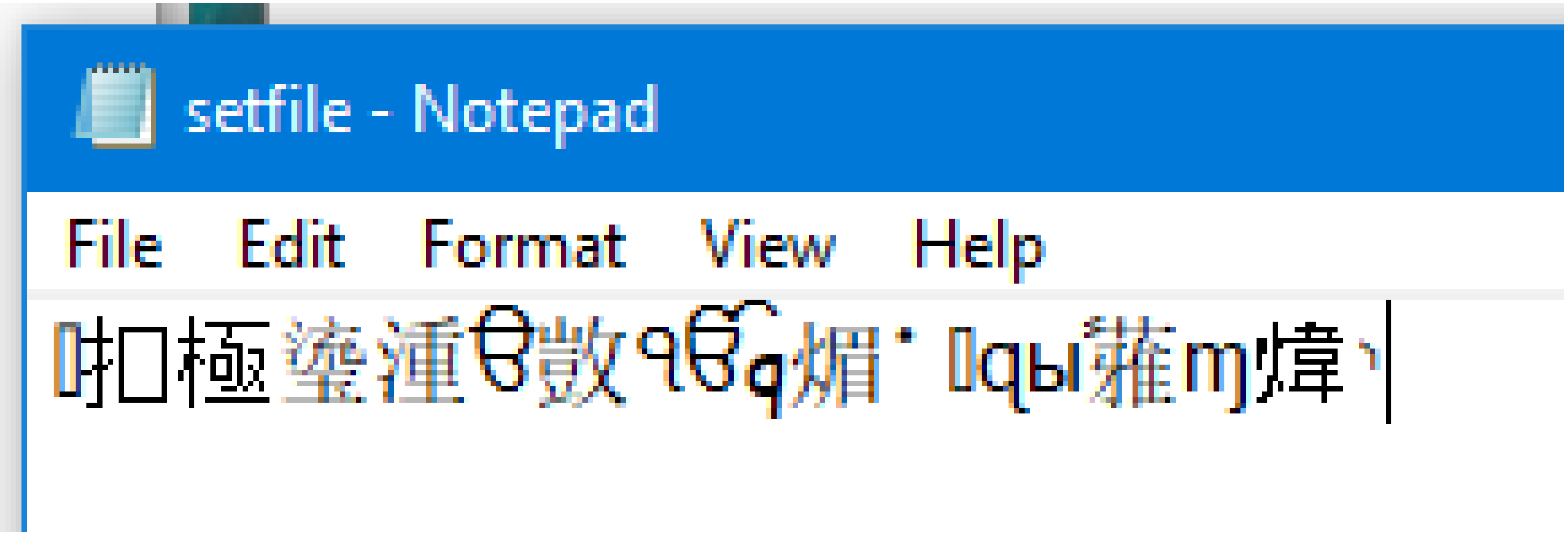
```
import pickle
infile1 = open(‘thefile.dat’, ’rb’)
set1 = pickle.load(infile1)
infile1.close()
```

Try This

```
import pickle
def main():
    set01 = set([2,4,6,8,10,12,14,16,18,20])
    print(‘set01: ‘,set01)
    outfile1 =  open(‘c:/temp/pk2file.dat', 'wb')
    pickle.dump(set01,outfile1)
    outfile1.close()
main()
```

pickle05

The file



```
吋□極瑬逋ੳ数੧ੳ̃q媚˙ □qы犕ŋ煒ˋ
```

Try This

```
import pickle
def main():
    infile1=open('c:/temp/setfile.dat','rb')
    set02=pickle.load(infile1)
    print('set02: ',set02)
    infile1.close()
main()
```

pickle06

done