Information Technology

Year 2020/2021

Introduction to Programming

Programming in Python

Files

- Reading from a file
  - First create a text file called pi_digits.txt


```
jupyter   pi_digits.txt ✔ a few seconds ago

File    Edit    View    Language

1   3.1415926535
2     8979323846
3     2643383279
```

Files

- Reading from a file
  - Reading the file pi_digits


```
In [2]:  with open('pi_digits.txt') as file_object:
             contents = file_object.read()
             print(contents)

         3.1415926535
           8979323846
           2643383279
```
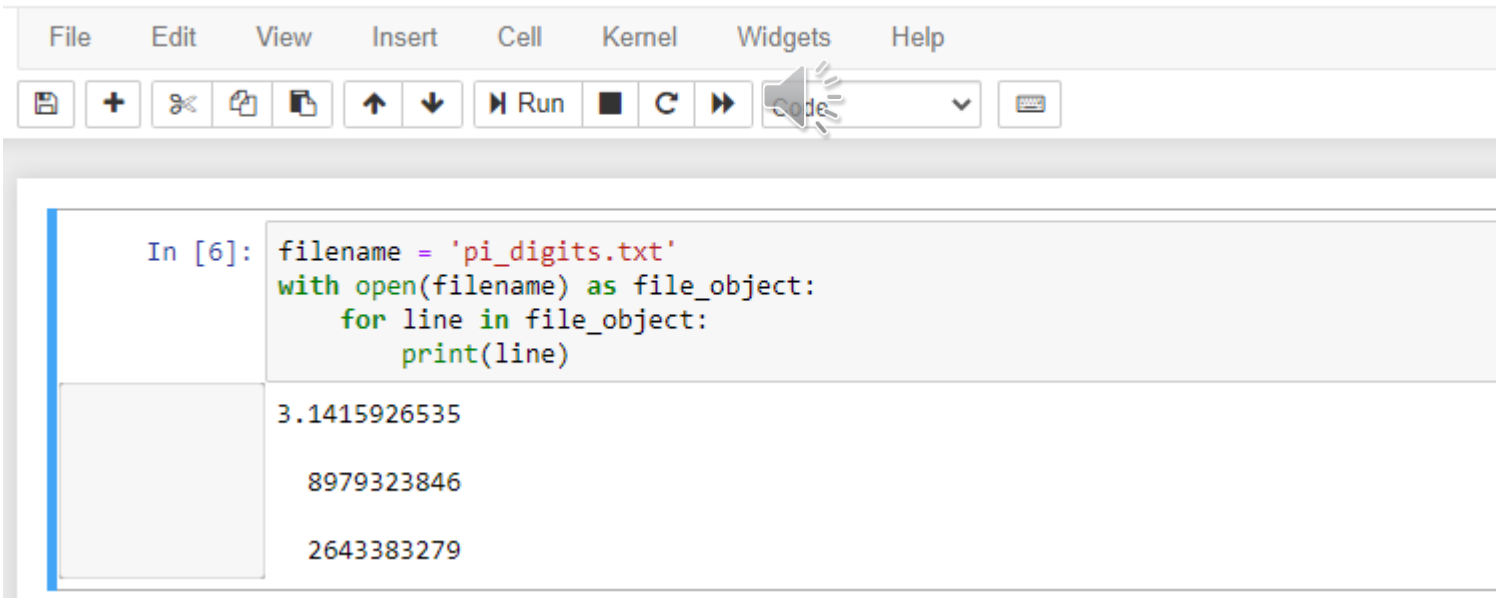
Files

- Reading from a file
  - Reading the file pi_digits line per line


```
In [6]: filename = 'pi_digits.txt'
        with open(filename) as file_object:
            for line in file_object:
                print(line)

3.1415926535

  8979323846

  2643383279
```

Files

- Reading from a file
  - Reading the file pi_digits line per line into a list


```
In [7]: filename = 'pi_digits.txt'
        with open(filename) as file_object:
            lines = file_object.readlines()
        for line in lines:
            print(line.rstrip())

        3.1415926535
          8979323846
          2643383279
```

Files

- Writing to a file
  - Will overwrite the existing file


```
In [8]: filename = 'example.txt'
        with open(filename,'w') as file_object:
            file_object.write("first line \n")
            file_object.write("second line\n")
```

Files

- Writing to a file
  - Will append the text to the existing file


```
jupyter  Untitled4  Last Checkpoint: 23 minutes ago  (unsaved changes)

File   Edit   View   Insert   Cell   Kernel   Widgets   Help

In [9]:  filename = 'example.txt'
         with open(filename,'a') as file_object:
             file_object.write("third line \n")
```