

# Addendum to Module 10: Tracing File Operations

Topics:

- Tracing File input
- Tracing File output

# Opening a File

```
f = open("myfile.txt","r")
```

variable that  
refers to the file  
(file handle)

filename

```
f = open("myfile.txt","w")
```

# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

next line to execute

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

lines = []

```
lines = []
```

next line to execute

```
next_str = f.readline()
```

```
while next_str != "":
```

```
    lines.append(next_str)
```

```
    next_str = f.readline()
```

# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "John Phillips\n"  
lines = []
```

```
lines = []
```

```
next_str = f.readline()
```

next line to execute

```
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "John Phillips\n"  
lines = []
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute



# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "John Phillips\n"  
lines = ["John Phillips\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute

# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "Mary Beukeboom\n"  
lines = ["John Phillips\n"]
```

```
lines = []
```

```
next_str = f.readline()
```

next line to execute

```
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```



# Reading a File

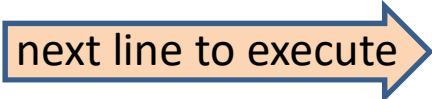
my\_input\_file.txt



```
John  Phillips  
Mary Beukeboom  
Eunsuk Kang
```

```
next_str = "Mary Beukeboom\n"  
lines = ["John  Phillips\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```



next line to execute

# Reading a File

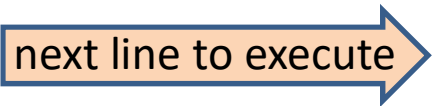
my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "Mary Beukeboom\n"  
lines = ["John Phillips\n",  
         "Mary Beukeboom\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```



next line to execute

# Reading a File

my\_input\_file.txt

John Phillips  
Mary Beukeboom  
Eunsuk Kang



```
next_str = "Eunsuk Kang\n"  
lines = ["John Phillips\n",  
         "Mary Beukeboom\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute



# Reading a File

my\_input\_file.txt

John Phillips  
Mary Beukeboom  
Eunsuk Kang



```
next_str = "Eunsuk Kang\n"  
lines = ["John Phillips\n",  
         "Mary Beukeboom\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute



# Reading a File

my\_input\_file.txt



John Phillips  
Mary Beukeboom  
Eunsuk Kang

```
next_str = "Eunsuk Kang\n"  
lines = ["John Phillips\n",  
         "Mary Beukeboom\n",  
         "Eunsuk Kang\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```



next line to execute

# Reading a File

my\_input\_file.txt



```
John  Phillips  
Mary  Beukeboom  
Eunsuk Kang
```

```
next_str = ""  
lines = ["John  Phillips\n",  
         "Mary  Beukeboom\n",  
         "Eunsuk Kang\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute

# Reading a File

my\_input\_file.txt

John Phillips  
Mary Beukeboom  
Eunsuk Kang



```
next_str = ""  
lines = ["John Phillips\n",  
         "Mary Beukeboom\n",  
         "Eunsuk Kang\n"]
```

```
lines = []  
next_str = f.readline()  
while next_str != "":  
    lines.append(next_str)  
    next_str = f.readline()
```

next line to execute

# Writing a File

my\_output\_file.txt



```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]]
```

next line to execute



```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```



# Writing a File

my\_output\_file.txt



```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["John", "Phillips"]
```

```
for n in names:
```

next line to execute

```
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

# Writing a File

my\_output\_file.txt

John

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["John", "Phillips"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

next line to execute

# Writing a File

my\_output\_file.txt

JohnPhillips

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["John", "Phillips"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

next line to execute

# Writing a File


my\_output\_file.txt



JohnPhillips

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["John", "Phillips"]
```

next line to execute



```
for n in names:
```

```
    f.write(n[0])
```

```
    f.write(n[1])
```

```
    f.write("\n")
```

# Writing a File

my\_output\_file.txt



```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["Mary", "Beukeboom"]
```

```
for n in names:
```

next line to execute

```
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

# Writing a File

my\_output\_file.txt

JohnPhillips

Mary

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["Mary", "Beukeboom"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

next line to execute

# Writing a File

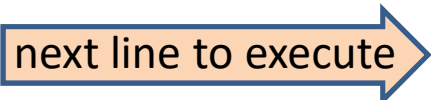
my\_output\_file.txt



JohnPhillips  
MaryBeukeboom

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["Mary", "Beukeboom"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```



next line to execute

# Writing a File


my\_output\_file.txt



```
JohnPhillips
MaryBeukeboom
```

```
names =
    ["John", "Phillips"],
    ["Mary", "Beukeboom"],
    ["Eunsuk", "Kang"]
n = ["Mary", "Beukeboom"]
```

next line to execute



```
for n in names:
    f.write(n[0])
    f.write(n[1])
    f.write("\n")
```



# Writing a File

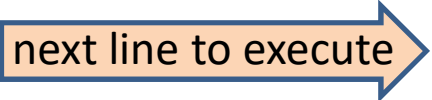
my\_output\_file.txt



```
JohnPhillips  
MaryBeukeboom
```

```
names =  
    [“John”, “Phillips”],  
    [“Mary”, “Beukeboom”],  
    [“Eunsuk”, “Kang”]  
n = [“Eunsuk”, “Kang”]
```

```
for n in names:
```



next line to execute

```
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

# Writing a File

my\_output\_file.txt

JohnPhillips  
MaryBeukeboom  
Eunsuk

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["Eunsuk", "Kang"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

next line to execute

# Writing a File

my\_output\_file.txt

JohnPhillips  
MaryBeukeboom  
EunsukKang

```
names =  
    ["John", "Phillips"],  
    ["Mary", "Beukeboom"],  
    ["Eunsuk", "Kang"]  
n = ["Eunsuk", "Kang"]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```

next line to execute

# Writing a File

my\_output\_file.txt



```
JohnPhillips  
MaryBeukeboom  
EunsukKang
```

```
names =  
    [“John”, “Phillips”],  
    [“Mary”, “Beukeboom”],  
    [“Eunsuk”, “Kang”]  
n = [“Eunsuk”, “Kang”]
```

```
for n in names:  
    f.write(n[0])  
    f.write(n[1])  
    f.write("\n")
```



next line to execute