

1. Getting a File Object

There is a Python's build-in command called open.

```
# Basic way of getting file object
# We can choose file mode by 'a', 'r', 'w' keywords.

f = open('test.txt', 'r')

# Check the name of file
print(f.name)

# Check the name of file mode
print(f.mode)

# Close file
f.close()
```

2. Getting a File Object using a Context Manager

If we didn't close the file which we work, this file ends up with leaks cause us to run over the maximum allowed file descriptors on our systems. With a context manager, we don't have to worry about closing file.

```
# Variable name will be located in right
with open('test.txt', 'r') as f:
    f_contents = f.read()
    # f_contents = f.readlines() -> Read file in one line
    # f_contents = f.readline() -> Read file one by one
    print(f_contents)

# Check if file is closed
print(f.closed)
```

3. Getting a File Object by size

We can specify size to read file by inputting integer in read function.

```
with open('test.txt', 'r') as f:
    size_to_read = 100
    f_contents = f.read(size_to_read)

    while len(f_contents) > 0:
        print(f_contents, end='')
        f_contents = f.read(size_to_read)

# Tell the location of current character in file
print(f.tell())

# Set the file's current position at the offset
print(f.seek())
```

4. Writing to File Object

To write something new into file, we need to use file mode 'w'. In writing mode, Python overwrite input contents into original contents. In that case, we need to use file mode 'a'.

```
with open('test2.txt', 'w') as f:
    # If we just use pass command, this will create empty file
    f.write('Test')

    # In writing mode, f.seek() function overwrite whole contents of file and rewrite contents

# Copy contents of one file to another
with open('test.txt', 'r') as rf:
    with open('test_copy.txt', 'w') as wf:
        for line in rf:
            wf.write(line)
```

5. Reading and Writing Bytes in File Object

```
with open('cat.jpg', 'rb') as rf:
    with open('cat_copy.jpg', 'wb') as wf:
        for line in rf:
            wf.write(line)
```