How To Read Files Piece by Piece

Instead of reading the whole file, we are going to learn how to read a file in small chunks

we'll cover the following ^

How to Read a Binary File

The easiest way to read a file in chunks is to use a loop. First we will learn how to read a file line by line and then we will learn how to read it a kilobyte at a time. We will use a **for** loop for our first example:

```
handle = open("test.txt", "r")

for line in handle:
    print(line)

handle.close()
```

Here we open up a read-only file handle and then we use a **for** loop to iterate over it. You will find that you can iterate over all kinds of objects in Python (strings, lists, tuples, keys in a dictionary, etc). That was pretty simple, right? Now let's do it in chunks!

```
handle = open("test.txt", "r")

while True:
    data = handle.read(1024)
    print(data)
    if not data:
        break
```

In this example, we use Python's **while** loop to read a kilobyte of the file at a time. As you probably know, a kilobyte is 1024 bytes or characters. Now let's pretend that we want to read a binary file, like a PDF.

How to Read a Binary File

Reading a binary file is very easy. All you need to do is change the file mode:

```
handle = open("test.pdf", "rb")
```

So this time we changed the file mode to **rb**, which means **read-binary**. You will find that you may need to read binary files when you download PDFs from the internet or transfer files from PC to PC.