

In this lecture, we will discuss...

- ✧ Reading and writing to files
- ✧ Exceptions
- ✧ Reading values from environment variables



Reading from File

```
File.foreach( 'test.txt' ) do |line|  
  puts line  
  p line  
  p line.chomp # chops off newline character  
  p line.split # array of words in line  
end
```

test.txt

The first line of the file
And the second
Third

```
The first line of the file  
"The first line of the file\n"  
"The first line of the file"  
["The", "first", "line", "of", "the", "file"]  
And the second  
"And the second\n"  
"And the second"  
["And", "the", "second"]  
Third  
"Third"  
"Third"  
["Third"]
```

Output



Reading from Non Existing File

```
1 File.foreach( 'do_not_exist.txt' ) do |line|
2   puts line.chomp
3 end
4
5
6
```

```
/Users/kalmanhazins/coursera/code-module2/Lecture5-Files-Environment-
Vars/read_from_file_handle_exceptions.rb:1:in `foreach': No such file
or directory @ rb_sysopen - do_not_exist.txt (Errno::ENOENT)
```



Handling Exceptions

```
1  begin
2
3      File.foreach( 'do_not_exist.txt' ) do |line|
4          puts line.chomp
5      end
6
7      rescue Exception => e
8          puts e.message
9          puts "Let's pretend this didn't happen..."
10     end
11
```

```
No such file or directory @ rb_sysopen - do_not_exist.txt
Let's pretend this didn't happen...
```



Alternative to Exceptions

```
if File.exist? 'test.txt'  
  File.foreach( 'test.txt' ) do |line|  
    puts line.chomp  
  end  
end
```



Writing to File

The file is automatically closed after the block executes

write_to_file.rb

```
File.open("test1.txt", "w") do |file|  
  file.puts "One line"  
  file.puts "Another"  
end
```

test1.txt

```
1 One line  
2 Another  
3
```



Environment Variables

If needed, revisit Module 1 on how to setup environment variables for your Operating System

```
puts ENV["EDITOR"] # => subl
```



Summary

- ✧ Files **automatically closed** at the end of the block
- ✧ **Either** use exception handling **or** check for existence of the file before accessing

What's next?

- ✧ Strings and Symbols

