# Strings and Escape Sequences

# Lesson Outcomes

1. Know what a string is
2. Know how to create strings and assign them to variables
3. Understand what an escape sequence is and know how to use common escape sequences
4. Know how to slice strings
5. Know how to access characters within a string by index

# What is a String?

# Creating Strings in Python

```python
str1 = 'This is a string'

str2 = '1984!'

str3 = 'rude & not ginger'

str4 = "LiVe LONG and PRosPEr."

str5 = "!@#$%^&*()_-+=/.,?><:;~`|][}{"

str6 = ""
```

# What is an Escape Sequence?

```python
str1 = "The book "A Feast for Crows" was written by George R. R. Martin"

print(str1)  # copying this code and running it would result in an error
```

```python
str2 = "The book \"A Feast for Crows\" was written by George R. R. Martin"

print(str2)

# if you copy the above code from this box into Pycharm, it would output

The book "A Feast for Crows" was written by George R. R. Martin
```

# Where to Find Other Escape Sequences

http://www.tutorialspoint.com/python/python_strings.htm

https://learnpythonthehardway.org/book/ex10.html

# Accessing By Index

```
str = "example"

ex1 = str[0]  # assigns the variable ex1 "e"

ex2 = "tape"[2]  # assigns variable ex2 "p"
```

# Slicing A String

```
example = "apples"

ex1 = example[:3]  # assign the string "app" to the variable ex1

ex2 = example[2:5]  # assign the string "ple" to the variable ex2

ex3 = example[3:]  # assign the string "les" to the variable ex3
```

```
ex4 = "apples"[:3]  # assign the string "app" to the variable ex4

ex5 = "apples"[2:5]  # assign the string "ple" to the variable ex5

ex6 = "apples"[3:]  # assign the string "les" to the variable ex6
```

# Recap

1. Know what a string is
2. Know how to create strings and assign them to variables
3. Understand what an escape sequence is and know how to use common escape sequences
4. Know how to slice strings
5. Know how to access characters within a string by index

# What's Next?