Starter - Files

These tasks are designed to refresh the reading and research you have undertaken at home prior to this lesson. If you have not completed the R&R assignment then please speak to your teacher before attempting these exercises.

Modes and encoding

You have been introduced the the various file opening modes that are used in Python. Refresh your knowledge of these concepts by attempting the below tasks.

Task 1

Mode	Explanation
`a`	append, adding to the current file
`w`	write, writes over the file selected
`r`	read, reads the file

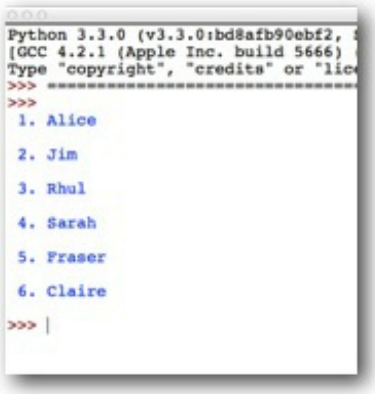
Task 2

You must set the encoding parameter when opening a file. Identify the encoding method you should use and in the space provided explain why:

Encoding	Explanation
utf-8	It means that the text file is cross platform and will be displayed the same on any machine

Reading from a file

The screenshot below shows the result of reading in the names of students from a file and then printing them to the screen.



The code for printing the students to the screen is shown below:

```
for index, student in enumerate(student_file):
    print("{0:>2}. {1}".format(index+1, student))
```

Task 3

For the above code, explain what each of the following sections of code do:

Section	Explanation
`index`	index adds 1 every time it goes through the for loop
`{0:>2}`	sends the text to align right and the two is the column width that you right align your value to

Task 4

In the above screenshot there are gaps between each student in the list. It should look like the screenshot below.

Attempt to explain why there are gaps between each student and then suggest how the above code could be improved to remove them.

Space for your answer: it is because the is a new line is adding one after the statement and then the print statement also adds one on so that it adds in two lines so you need to change the print ending to `end = ""`

Exception Handling

Exception Handling is used to deal with **known errors** in a more elegant manor than crashing the program. Take a look at the following code:

```
try:
    score = int(input(“Please enter your score: “)
except:
    print(“Please enter an integer value only”)
print(Your score was {0}”.format(score))
```

Task 5

Identify and **explain** (without running the code) all of the errors in this code

Error	Explanation
ValueError	you need `except ValueError:` to display the correct error message
syntax error	missing the speech marks round the text in the final print statement

Error	Explanation
missing bracket	bracket missing on the input statement
final print should be in with the try	

> Written with StackEdit.