

CS0008: Intro to Python
Weekly Assignment 6
Files and Exceptions

Files are used to store information that may be needed later by a user or by a program. The information in a file is sometimes organized as records which is a collection of related fields. In this assignment you will implement a student score record for an exam. The record will consist of the student's name, ID number, and their score.

Part 1: Writing to a file

For this part, we are going to ask the user to input the record information for a student and write it to a file until the user has no more students to enter.

Therefore, please create a function called `write_scores()` which uses a while loop to write the student name, ID number, and score to a file called `scores.txt`. Each of these fields should be written to a new line in the file and the user should be asked if there are more students after entering each record.

Part 2: Reading from a file

Please create a function called `read_scores()` which uses a while loop to read each record from the `scores.txt` file and displays them one by one in an organized way (see below for example output). Note that you may need to strip the new line character from each line so that extra blank lines do not appear. Your function should handle `IOError` exceptions, which are raised when there is an issue with opening the file or reading its data, by printing "Trouble opening file. Try again." and not executing any more of the code. Your function should also handle any `ValueError` exceptions, which are raised when the items that are read from the file are converted to a number, by printing "Number conversion error. Try again." and not executing any more of the code.

```
Name:      Muneeb Alvi
ID:        123456
Score:     83
```

```
Name:      John Smith
ID:        7890123
Score:     77
```