Objectives:

* Writing and reading files
* Try and catch statement
* Intro to GUI Interfaces

**There are 8 challenge exercises with 8 print screens, each worth 12.5%**

Please submit this document for grading when completed… Please work in-groups.

**Project #1** (Writing and Reading files)

Graphical user interface, text, application, email

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

A screenshot of a computer screen

Description automatically generated with medium confidence

Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Text

Description automatically generatedA picture containing logo

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Text

Description automatically generated

A screenshot of a computer screen

Description automatically generated with medium confidence

**Challenge Exercise #1:** write a program that will ask the user to enter the first, last name with the age, and write the contents to a file, and then read from the file.

**#1 print screen the running application with code below here.**

Text

Description automatically generated

**Text

Description automatically generated**

**Graphical user interface, application, Teams

Description automatically generated**

**Project #2** (Writing numeric data)

Text

Description automatically generated with medium confidence

**Program’s code and output:**

Graphical user interface, text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

**Challenge Exercise #2:** continuing with project #2, read the data using the print statement.

**#2 print screen the running application with code below here.**

**Graphical user interface, text

Description automatically generated**

**Text

Description automatically generated**

**Project #3** (Writing and reading the Sales Data)

Text, letter

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Text

Description automatically generated with medium confidence

**Challenge Exercise #3:** continuing from project #3, write a program that will ask the user to enter the sales with salary, and if the total sales are greater than 1000 add 10% commission to the salary write and read the data using the print statement.

*Please enter the following test data: enter 80,000 for the salary, enter the days of sale as 5, each sale entered will be 1000, see below*

Text

Description automatically generated

**#3 print screen the running application with code below here.**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

Text

Description automatically generated

Text

Description automatically generated with medium confidence

**Project #4** (Write Records)

Text

Description automatically generated

**Program’s code and output:**

Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

**Challenge Exercise #4:** Continuing with project #4, read the content of the employees.txt file

**#4 print screen the running application with code below here.**

Text

Description automatically generated

Text

Description automatically generated

**Text

Description automatically generated**

**Project #5:** using the try and catch statement with the while loop

Graphical user interface, text, application, email

Description automatically generated

**Program’s code and output:**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Graphical user interface, text

Description automatically generated**

**Project #5 (**Introducing GUI interfaces using Tkinter)

**Text

Description automatically generatedText

Description automatically generated**

**Program’s code and output:**

**Text

Description automatically generated**

**Graphical user interface, text, application

Description automatically generated with medium confidence**

**Graphical user interface, application

Description automatically generated**

**Graphical user interface, text, application, chat or text message

Description automatically generated**

**Graphical user interface, text, application, chat or text message

Description automatically generated**

**Graphical user interface, text, application, chat or text message

Description automatically generated**

**Graphical user interface

Description automatically generated**

**Challenge Exercise #5:** Continuing with project #5, add the address, city, state with zip code and transfer the information to a text file.

**#5 print screen the running application with code below here.**

Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Text

Description automatically generated

**Challenge Exercise #6:** create a **GUI** interface that will write 3 numbers and sum + averages the total into a text file.

**Example output in the text file**

The three numbers are: 1, 2 and 3

The total is 6

The average is 2

**#6 print screen the running application with code below here.**

**Text

Description automatically generated**

**Text

Description automatically generated**

****

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Text

Description automatically generated

**Challenge Exercise #7:** create a console (**NO GUI**) application that will ask the user to enter the full name, with the grade of the midterm and final exam and **write** the **average** grade with **letter** grade into a text file. Use the table as a guide. Use also the try statement for this application. Make sure to append the data and **read** the content of the file also.

Use the

|  |  |
| --- | --- |
| 90-100 | Letter grade A |
| 80-89 | Letter grade B |
| 70-79 | Letter grade C |
| 60-69 | Letter grade D |
| Under 60 | Letter grade F |

**#7 print screen the running application with code below here.**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

Text

Description automatically generated

Text

Description automatically generated

**Challenge Exercise #8:** create a console application (**NO GUI**) that will write random numbers from 1-10 into a text file and read the contents.

**#8 print screen the running application with code below here.**

**Text

Description automatically generated**

**Text

Description automatically generated**

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

**Submit this document to Module 6 Class Exercise.**