# Exercises 5
# Files & Exceptions

TO SOLVE THESE YOU CAN **GOOGLE, COLLABORATE AND ASK** THE TEACHERS AS MUCH AS YOU WANT!!!!!

1. Write a Python program to **read** an **entire** text file.
2. Write a Python program to **read** first **n lines** of a file.
3. Write a Python program to **append** text to a file and **display** the text.
4. Write a Python program to **read** a file **line** by **line** and **store** it into a **list**.
5. Write a Python program to **read** a file **line** by **line** store it into a **variable**.
6. Write a Python program to **count** the number of **lines** in a text file.
7. Write a Python program to **write** a list to a file.
8. Write a Python program to **assess** if a file is **closed** or not.
9. Write a Python program to **remove newline characters** from a file.
10. Add a *try-except* statement to the body of this function which handles a possible **IndexError**, which could occur if the index provided exceeds the length of the list. Print an error message if this happens:

```
def print_list_element(thelist, index):
    print(thelist[index])
```

11. This function adds an element to a list inside a dict of lists. Rewrite it to use a *try-except* statement which handles a possible **KeyError** if the list with the name provided doesn't exist in the dictionary yet, instead of checking beforehand whether it does.

```
def add_to_list_in_dict(thedict, listname, element):
    if listname in thedict:
        l = thedict[listname]
```

```
        print("%s already has %d elements." % (listname,
len(l)))
    else:
        thedict[listname] = []
        print("Created %s." % listname)

    thedict[listname].append(element)

    print("Added %s to %s." % (element, listname))
```

*HINT There are two other clauses that we can add to a try-except block:* ***else*** *and* ***finally****.* ***else*** *will be executed only if the* ***try*** *clause doesn't raise an exception*

```
try:
    age = int(input("Please enter your age: "))
except ValueError:
    print("Please, write a number!")
else:
    print("I see that you are %d years old." % age)
finally:
    print("Bye!")
```

12. Rewrite the program from exercise 11 so that the exception which is caught in the **except** clause is re-raised after the error message is printed.

Last 10 minutes round the table what was hardest/most fun