A close-up of logos

Description automatically generated

**BITP 3113**

**OBJECT ORIENTED PROGRAMMING**

**LAB:**

**LAB 10 - EXCEPTION**

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# Exercise 1

1. Download the class **labexception-exerciseone.**zip from ulearn.
2. Execute the DataManipulatorApp class.
3. Observe the output.
4. Then, execute the SecureDataManipulatorApp class.
5. Observe the output from this class too.
6. Compare the output from both executions.

Ǫuestion: Which execution ends gracefully? State your reason(s). Record your answer in ulearn

**Output**

**DataManipulatorApp**

A screen shot of a computer

AI-generated content may be incorrect.

**SecureDataManipulatorApp**

A screen shot of a computer

AI-generated content may be incorrect.

Execution that ends gracefully is **SecureDataManipulatorApp** because the code is wrapped in a **try-catch** block

* When the loop tried to access an invalid index (sampleData [4]), it triggered the exception ***ArrayIndexOutOfBoundsException***.
* The exception is caught by the ***catch*** block which prints the message “**End of data access. There are only 4 data in the sample**” and it breaks the loop without crashing the program

For **DataManipulatorApp**

* **The code tries to access an invalid index without a try-catch.**
* This causes the programto **crash with a runtime exception.**
* The line ***System.out.println("End of data access");*** is never reached.