Development Exercises – L1

Goal: The target of these exercises is to enable the student to practice and master programming skills during the course.

Instructions: You are required to submit programming assignments. More practice, more mastery. You must upload a PDF version of your source code and screen images for the tests execution as evidence of your work for these exercises.

Rubric Evaluation:

- Complete functionality – 40%
- Correct functionality – 30%
- Complete test cases – 30 %

Programming Exercise	**Description**	**Practice**	**Test Cases and Evidence**
1 – FIND THE NUMBER	Create a program invoked in the command line. It generates a random number between 1 and 30 (including 1 and 30). Ask the user to guess the number, then tell them whether they guessed too low, too high, or exactly right. • Keep the game going until the user types "exit" or find the number • Keep track of how many guesses the user has taken, and when the game ends, print them out on console and in a file named GuessingSteps.txt Name of the program: findNumber.py	• Control structures • Console Input output • Saving into a file	Record three runs
2 - CONVERTER	Create a command line program that take as input parameter a number and then it displays in the console the	• Control structures • Console Input output	Identify 10 test cases

	corresponding number (positive integers Plus Zero) in Binary and Hexadecimal. It also manages errors using exceptions for not using numbers. Covert the number using the algorithm and not a function. Name of the program: convert2X.py	• Error Handling	
3 – Count Words	Create a program that parses a file given as parameter and counts the number of occurrences for a list of words identified in the file. The identification is sensitive case. The program will accept the words to test as arguments. English or Spanish. Name of the program: findWords.py	• Control structures • Console Input output • Error Handling • String manipulation	Identify 3 test cases