

**Allen E. Paulson College of Engineering& Computing**

**Department of Information Technology**

**Project 1**

Report for **Project 1** that is due on Sunday, January 23, 2022

As part of ITW 2431 Data Programming II

**Name: Michael Patak**

**Date of Submission: Sunday, January 23, 2022**

# Section 1 – Project 1 Problem 1 Purpose(s) of Program Problem, Output of Sample Run, and Learning Experience

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| 1. **Purpose(s) of Problem: The program will take 4 user inputs as variables. The program will calculate the total price paid by the customer. The program will print out the price paid two different ways.** |
| 1. **Source Code File Name:** ITW2431\_P1\_P1\_mpatak.py |
| 1. **Other Supporting File(s) (if any):** n/a |
| 1. **Hours Spent on Developing the Solution of the Problem and Writing the Program:** 1 hour |
| 1. **The Output of Program Sample Run:** |
| 1. **Overall Learning Experience for the Problem: For this problem I did not to just print out the result the default way and as a float rounded with two significant digits. I imported the locale module so that I could format the result using locale.currency(), so that the currency function would add the ‘$’ and have two significant digits representing the cents.** |

# Section 2 – Project 1 Problem 2 Purpose(s) of Program Problem, Output of Sample Run, and Learning Experience

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| 1. Purpose(s) of Problem: Program will take as input a number. The number will be how many rows of stars (asterisks) to print out as a pyramid. |
| 1. **Source Code File Name:** ITW2431\_P1\_P2\_mpatak.py |
| 1. **Other Supporting File(s) (if any): n/a** |
| 1. **Hours Spent on Developing the Solution of the Problem and Writing the Program: 1 hour** |
| 1. **The Output of Program Sample Run:** |
| 1. **Overall Learning Experience for the Problem: The prepending spaces unto a string was challenging at first. Then I found the build the string of ‘stars’ first and indenting the string the correct number of spaces worked great with just a few lines of code.** |

# Section 3 – Project 1 Problem 3 Purpose(s) of Program Problem, Output of Sample Run, and Learning Experience

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| 1. Purpose(s) of Problem: The program will read an input file named 'ExamGrade.txt'. Each line of the file contains a numerical grade. The program will read each line and output the student and grade. After reading every grade the program will calculate the   average of all grades. |
| 1. **Source Code File Name:** ITW2431\_P1\_P3\_mpatak.py |
| 1. **Other Supporting File(s) (if any): ExamGrade.txt** |
| 1. **Hours Spent on Developing the Solution of the Problem and Writing the Program: 1 hour** |
| 1. **The Output of Program Sample Run:** |
| 1. **Overall Learning Experience for the Problem: The problem was a good refresher for reading and parsing text files with Python.** |

# Section 4 – Assignment xx Prob x Purpose(s) of Program Problem, Output of Sample Run, and Learning Experience

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| 1. **Purpose(s) of Problem:** |
| 1. **Source Code File Name:** |
| 1. **Other Supporting File(s) (if any):** |
| 1. **Hours Spent on Developing the Solution of the Problem and Writing the Program:** |
| 1. **The Output of Program Sample Run:** |
| 1. **Overall Learning Experience for the Problem:** |

# Section 5 – Assignment xx Prob x Purpose(s) of Program Problem, Output of Sample Run, and Learning Experience

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| 1. **Purpose(s) of Problem:** |
| 1. **Source Code File Name:** |
| 1. **Other Supporting File(s) (if any):** |
| 1. **Hours Spent on Developing the Solution of the Problem and Writing the Program:** |
| 1. **The Output of Program Sample Run:** |
| 1. **Overall Learning Experience for the Problem:** |