Report
CSE 425
Section: 02
Programming Languages Principles Assignment

We have written programs in three different languages (Python, Shell Script and C++) to parse data from a large CSV file. Now explaining some differences we found during our coding.

1. In terms of readability, Python is ahead. It is easily understood and uses indentation which is easier to maintain. Shell script is not easily readable. C++ is more readable than shell script but not more than python.

2. In terms of writability, shell script is way ahead than other two languages. It takes less codes to write program in shell script. Python also requires less code writing but C++ needs more lines of codes.

3. Python is the slowest among these three languages. It takes more time to fetch data from the file with python program. But shell script executes program directly in the command prompt and fetch data faster. C++ is somewhere between python and shell script in terms of performance.

4. Shell script only needs 432 bytes for the program. Where Python needs 601 bytes and C++ program aquires 1.7KB which is the highest.

We can come to the verdict that shell script coding performance and writability but lacks in readability. Python is also a fast language with easier syntax but lacks in performance sometimes. C++ is fastest but lacks in memory management and writability.

Submitted by:

1. Raiyad Raad (1331144042)
2. MD. Nasirul Islam (1420557042)