# CS571: Advanced Programming Techniques

Winter 2020

*Assignment #5*

**Due date: Tuesday, Feb 18 at 11:59pm**

**Part 1**

Write an bash script named A5\_part1.bash which calls an AWK program that performs the following functions.

1. It reads as input a comma-separated CSV file named people.txt where each line contains the first name, last name and email address of a person. Fields are separated by comma and all names are expected to be made of characters (no whitespace or special characters permitted), e.g.,

first,last,mail

1. If a line contains a gmail.com email address, the script outputs the entire line back with the word “ matched” appended at the end, e.g.,,

Dimitra,Vista,dv35@gmail.com matched

Submit the file A5\_part1.bash.

**Part 2**

Write a Java or Python program that implements the same functionality as in Part 1. If you know both Java and Python, please use Java for this exercise. Java demonstrates the point of this exercise more.

Submit the file A5\_part2.java or A5\_part2.py.

**Part 3**

Write a bash script named A5\_part3.bash that performs the following functions.

1. It reads as input a comma-separated CSV file named students.txt where each line contains the first name, last name and userid for each student. Fields are separated by comma and you can assume that there are no whitespace or special characters in the fields, e.g.,

first,last,userid

e.g the input file might be

Hans,Solo,hs01

Darth,Vader,dv01

Obi-Wan,Kenobi,owk2

…

Dimitra,Vista,dv35

1. It creates a directory named A5 if one does not exist already.
2. It clears all contents (deletes everything) inside directory A5.
3. I uses an awk program to create a subdirectory for each student in the student file using last.first.userid as the subdirectory name. (hint: check out the xargs command)

Submit the file A5\_part3.bash.