CTS-120-841-Lab Module 12

* In this lab you will create shell script, answer a few questions, and show me the results.
* Just like in real life you will build the final script in small pieces, doing 1 step at a time, adding functionality as you go.
* Each step is worth 2 points, except the last one; it is worth 6 points
* Include a screen print of **just the area of the screen with the desired result** (not the whole screen) in the table cell below the question, unless otherwise instructed.
  + *Reminder: Use the* ***Shift-Ctrl-Prtscr shortcut*** *& select just the area that you want.*
* I have done one of them for you so you know the format & results that I will be grading on.
* Save the lab as a PDF, naming it:
  + ***FirstName\_Lastname-Module#-Lab.pdf***

Download the file awkfile.txt

Determine where each field is and what the delimiter is.

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| 1. Create an awk statement that takes the awkfile.txt and prints out:  * Product * Price * Payment method   Show me the output |
| awk statement  $ awk -F "," '$1 ~/Product[0-9]/ {print $1" "$2" "$3}' awkfile.txt |
| Output  Product1 1200 Mastercard  Product1 1400 Visa  Product1 1200 Mastercard  Product1 1700 Visa  Product2 3600 Visa  Product1 1200 Visa  Product4 1200 Mastercard  Product1 2200 Mastercard  Product5 1200 Mastercard  Product1 1800 Visa  Product1 1200 Diners  Product3 1200 Amex  Product1 1000 Mastercard  Product3 1200 Visa  Product1 3500 Visa  Product1 1300 Diners  Product6 1200 Visa  Product1 1200 Diners  Product2 3600 Visa |

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| 1. Take the statement that you just created and add functions to just bring up lines that have Product 1   Show me the first line of output |
| awk statement  [student@localhost ~]$ awk -F "," '$1 ~/Product1/ {print $1" "$2" "$3}' awkfile.txt |
| First line of output  Product1 1200 Mastercard  Product1 1400 Visa  Product1 1200 Mastercard  Product1 1700 Visa  Product1 1200 Visa  Product1 2200 Mastercard  Product1 1800 Visa  Product1 1200 Diners  Product1 1000 Mastercard  Product1 3500 Visa  Product1 1300 Diners  Product1 1200 Diners |

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| 1. Take the statement that you just created and add functions **to format the output to line up the columns**   Show me the statement & just the first 2 or 3 lines of output. |
| awk statement  awk -F "," '$1 ~/Product1/ {print $1" "$2" "$3}' awkfile.txt |column -t |
| first 2 or 3 lines of output  Product1 1200 Mastercard  Product1 1400 Visa  Product1 1200 Mastercard  Product1 1700 Visa  Product1 1200 Visa  Product1 2200 Mastercard  Product1 1800 Visa  Product1 1200 Diners  Product1 1000 Mastercard  Product1 3500 Visa  Product1 1300 Diners  Product1 1200 Diners |

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| 1. Take the statement that you just created and add functions to **sort the output by price**   Show me the statement & the output. |
| awk statement  awk -F "," '$1 ~/Product1/ {print $1" "$2" "$3}' awkfile.txt |column -t|sort -k 1 |
| Output  Product1 1000 Mastercard  Product1 1200 Diners  Product1 1200 Diners  Product1 1200 Mastercard  Product1 1200 Mastercard  Product1 1200 Visa  Product1 1300 Diners  Product1 1400 Visa  Product1 1700 Visa  Product1 1800 Visa  Product1 2200 Mastercard  Product1 3500 Visa |

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| 1. Take the statement that you just created and add functions to **sort the output by price with the highest price at the top**   Show me the statement & the output. |
| awk statement  awk -F "," '$1 ~/Product1/ {print $1" "$2" "$3}' awkfile.txt |column -t|sort -nr -k 1 |
| Output  Product1 3500 Visa  Product1 2200 Mastercard  Product1 1800 Visa  Product1 1700 Visa  Product1 1400 Visa  Product1 1300 Diners  Product1 1200 Visa  Product1 1200 Mastercard  Product1 1200 Mastercard  Product1 1200 Diners  Product1 1200 Diners  Product1 1000 Mastercard |

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| 1. Take the statement that you just created and add functions to **format the output to say:**   ***Name*** purchased ***Product*** for $***Price***, and paid by ***Payment\_Type***  Show me the statement & the output. |
| awk statement  awk -F "," '$1 ~/Product1/ {print "Name: "$4", purchased: "$1", for: "$2",\t paid by: " $3}' awkfile.txt |column -t|sort -nr -k 1 |
| Output \*\*(Sean’s entry isn’t formatted the same as the others, the code is ok) Output lined up perfectly on my screen\*\*  Name: Stacy, purchased: Product1, for: 1200, paid by: Diners  Name: Sean , purchased: Product1, for: 1000, paid by: Mastercard  Name: Richard, purchased: Product1, for: 3500, paid by: Visa  Name: Leanne, purchased: Product1, for: 1300, paid by: Diners  Name: LAURENCE, purchased: Product1, for: 1200, paid by: Visa  Name: Gouya, purchased: Product1, for: 1700, paid by: Visa  Name: Federica, purchased: Product1, for: 1200, paid by: Mastercard  Name: Carolina, purchased: Product1, for: 1200, paid by: Mastercard  Name: Betina, purchased: Product1, for: 1400, paid by: Visa  Name: Barbara, purchased: Product1, for: 1200, paid by: Diners  Name: Aidan, purchased: Product1, for: 1800, paid by: Visa  Name: Adam, purchased: Product1, for: 2200, paid by: Mastercard |

## Ok let’s get ready to put these statements into a script

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| 1. Create an awk statement to print the header   There is a header in the awkfile.txt, just print out the   * + Name   + Product   + Price   + Payment Type   fields and format them as needed. You may have to tweak them once you output the data as well.  Show me the statement & the output. |
| awk statement |
| Output |

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| 1. 6 Pts - Take the statement from question 5. Modify it so that we only match buyers that are not from the United States.   Combine that with and with the statement in #7 to create a script that will output the header, and the text, Like this  Name Product Price Payment\_Type Country  Carolina Product1 $1200 Mastercard United Kingdom  *\*\*\*Notice the $ next to the Price\*\*\**  *The exact spacing is not important, just make it readable*  Try to line them up the best you can using the |column –t, “ “(spaces) or the ‘\t’  Show me the statement & the output. |
| awk statement |
| Output |