

California University of PA
Dept. of Computer Science, Info Systems, and Engineering Technology



ACET440 Computer Networking

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= Lab Report =

Lab 3 Cypher

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I. Procedure

Open the virtual desktop and acquire the putty .exe from the putty website (<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>). Enter Draco1.calu.lcl in the host name and set it to SSH. When prompted for a login use your pennwest email and password, take care to enter the password correctly, it will not show the characters or how many are inputted (*Figure 1*). Locate the files Lab3.c, Shuffle.c, and Shuffle.h in the directory. Once all three files are located type the following three lines (*Figure 2*):

```
gcc -c Lab3.c
```

```
gcc -c Shuffle.c
```

```
gcc -o Lab3 Lab3.o Shuffle.o
```

Once that is complete, run the program with:

```
./Lab3
```

Follow the prompt to cypher the inputted text into the cyphered text shown in *figure 3*.

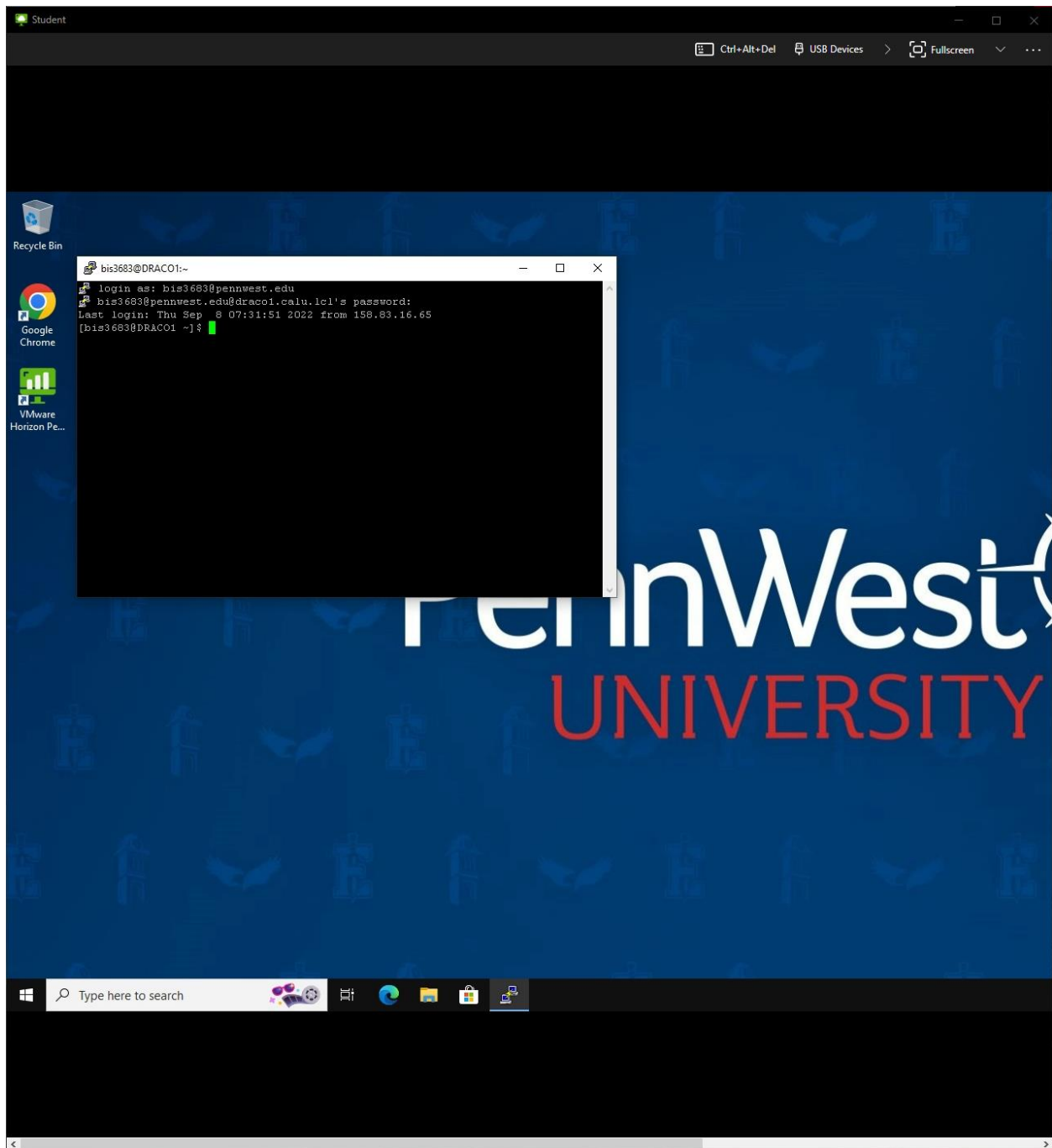


Figure 1: Logging into Draco1

```
bis3683@DRACO1:~/Lab3
[bis3683@DRACO1 Lab3]$ ls
Lab3.c  Shuffler.c  Shuffler.h
[bis3683@DRACO1 Lab3]$ gcc -c Lab3.c
[bis3683@DRACO1 Lab3]$ gcc -c Shuffler.c
[bis3683@DRACO1 Lab3]$ gcc -o Lab3 Lab3.o Shuffler.o
[bis3683@DRACO1 Lab3]$
```

Figure 2: Compile the files

```
[bis3683@DRACO1 Lab3]$ ./Lab3
Please input a string, finished with an Enter:
is this the correct output?
The encrypted string is !;%4,!;%4,:%</$$:<4%/o4Eo4~
The encryption key (i.e., the substitution) is original[substitution]
% [ ] ( [ ! ]
d [ " ] . [ # ] S [ $ ] [ % ] B [ & ] q [ ' ] 8 [ ( ] ) [ ) ] y [ * ] N [ + ]
( [ , ] z [ - ] - [ . ] g [ / ] J [ 0 ] 1 [ 1 ] F [ 2 ] 6 [ 3 ] e [ 4 ] A [ 5 ]
i [ 6 ] X [ 7 ] Z [ 8 ] 5 [ 9 ] f [ : ] | [ ; ] Q [ < ] _ [ = ] h [ > ] ~ [ ? ]
7 [ @ ] H [ A ] V [ B ] u [ C ] a [ D ] " [ E ] t [ F ] c [ G ] P [ H ] L [ I ]
# [ J ] k [ K ] O [ L ] + [ M ] w [ N ] j [ O ] s [ P ] n [ Q ] b [ R ] R [ S ]
p [ T ] [ [ U ] 2 [ V ] 9 [ W ] U [ X ] = [ Y ] > [ Z ] 3 [ [ ] } [ \ ] r [ ] ]
M [ ^ ] ] [ _ ] Y [ ` ] x [ a ] ^ [ b ] < [ c ] T [ d ] : [ e ] * [ f ] l [ g ]
, [ h ] ! [ i ] & [ j ] G [ k ] ` [ l ] I [ m ] \ [ n ] / [ o ] E [ p ] ? [ q ]
$ [ r ] ; [ s ] 4 [ t ] o [ u ] O [ v ] C [ w ] @ [ x ] W [ y ] v [ z ] K [ ( ]
D [ | ] m [ } ] ' [ ~ ]
[bis3683@DRACO1 Lab3]$
```

Figure 3: Run of the one Lab3 file with output