

A High Stakes Investigation

Scenario You have just been hired by Lucky Duck Casino as a security analyst. Lucky Duck has lost a significant amount of money on the roulette tables over the last month. The largest losses occurred on March 10, 12, and 15. Your manager believes there is a player working with a Lucky Duck dealer to steal money at the roulette tables. The casino has a large database with data on wins and losses, player analysis, and dealer schedules. You are tasked with navigating, modifying, and analyzing these data files to gather evidence on the rogue player and dealer. You will prepare several evidence files to assist the prosecution. You must work quickly as Lucky Duck can't afford any more losses. Lucky Duck Casino has provided you with the following files if required:

Roulette Player Data: Week of March 10 Employee Dealer Schedule: Week of March

Instructions Use your command-line skills to uncover the identities of the rogue casino player and dealer colluding to scam Lucky Duck out of thousands of dollars.

Investigation Preparation

I created directory by using mkdir command Begin by making a single directory titled Lucky_Duck_Investigations. where i created few more directories to start my investigation.

In this directory, create a directory for this specific investigation titled Roulette_Loss_Investigation. In Roulette_Loss_Investigation, create the following directories: Player_Analysis to investigate the casino player. Dealer_Analysis to investigate the dealers. Player_Dealer_Correlation to summarize your findings of the collusion. Create empty files called Notes_ under each subdirectory to store investigation notes. For example: Notes_Player_Analysis

```
sysadmin@UbuntuDesktop:~$ cd Lucky_Duck_Investigations/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ ls
3-HW-setup-evidence  3-HW-setup-evidence.1  Dealer_Schedules_0310  Roulette_Loss_Investigation  Roulette_Player_WinLoss_0310
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ cd Roulette_Loss_Investigation/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ ls
Dealer_Analysis  Player_Analysis  Player_Dealer_Correlation  Player_Dealer_Correlation.zip
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ cd Dealer_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ls
0310_Dealer_schedule  0312_Dealer_schedule  0315_Dealer_schedule  roulette_dealer_finder_by_time_and_game.sh  roulette_dealer_finder_by_time.sh
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ cd ..
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ cd Player_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Analysis$ ls
0310_win_loss_player_data  0312_win_loss_player_data  0315_win_loss_player_data
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Analysis$
```

Gathering Evidence

Your next task is to move evidence from the specific days that Lucky Duck experienced heavy losses at the roulette tables Lucky_Duck_Investigations: Contains the investigation directories and notes files I created. Roulette_Player_WinLoss_0310: Contains the data for player wins and losses. The Dealer_Schedules_0310 and Roulette_Player_WinLoss_0310 directories contain the dealer schedules and win/loss player data from the roulette tables during the week of March 10. Since the losses occurred on March 10, 12, and 15, move the schedules for those days into the directory Dealer_Analysis. Move the files for those days into the directory Player_Analysis.

```
sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/De...
File Edit View Search Terminal Help

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ mv Roulette_Player_WinLoss_0
310/0315_win_loss_player_data Roulette_Loss_Investigation/Player_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ cd Roulette_Loss_Investigati
on/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$
cd Player_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$ ls
0310_win_loss_player_data  0315_win_loss_player_data
0312_win_loss_player_data  Notes_Player_Analysis
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$ cd ..
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$
cd ..
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ mv Dealer_Schedules_0310/031
0_Dealer_schedule Roulette_Loss_Investigation/Dealer_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ mv Dealer_Schedules_0310/031
2_Dealer_schedule Roulette_Loss_Investigation/Dealer_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ mv Dealer_Schedules_0310/031
5_Dealer_schedule Roulette_Loss_Investigation/Dealer_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations$ cd Roulette_Loss_Investigati
on/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$
cd Dealer_Analysis/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/D
ealer_Analysis$ ls
0310_Dealer_schedule  0315_Dealer_schedule
0312_Dealer_schedule  Notes_Dealer_Analysis
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/D
ealer_Analysis$
```

Correlating the Evidence

Your next task is to correlate the large losses from the roulette tables with the dealer schedule. This will help you determine which dealer and player are colluding to steal money from Lucky Duck. Note: Winnings for Lucky Duck Casino are indicated with a positive number and losses are indicated with a negative number. Complete the player analysis. Navigate to the Player_Analysis directory. Use `grep` to isolate all of the losses that occurred on March 10, 12, and 15. Place those results in a file called `Roulette_Losses`. Preview the file `Roulette_Losses` and analyze the data.

```

sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Pla...
File Edit View Search Terminal Help
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$ grep -i - *
0310_win_loss_player_data:05:00:00 AM -$82,348 Amirah Schneider,Nola Po
rtillo, Mylie Schmidt,Suhayb Maguire,Millicent Betts,Avi Graves
0310_win_loss_player_data:08:00:00 AM -$97,383 Chanelle Tapia, Shelley
Dodson , Valentino Smith, Mylie Schmidt
0310_win_loss_player_data:02:00:00 PM -$82,348 Jaden Clarkson, Kaidan S
heridan, Mylie Schmidt
0310_win_loss_player_data:08:00:00 PM -$65,348 Mylie Schmidt, Trixie Ve
lasquez, Jerome Klein ,Rahma Buckley
0310_win_loss_player_data:11:00:00 PM -$88,383 Mcfadden Wasim, Norman C
ooper, Mylie Schmidt
0312_win_loss_player_data:05:00:00 AM -$182,300 Montana Kirk, Alysia Goo
dman, Halima Little, Etienne Brady, Mylie Schmidt
0312_win_loss_player_data:08:00:00 AM -$97,383 Rimsha Gardiner,Fern Cle
veland, Mylie Schmidt,Kobe Higgins
0312_win_loss_player_data:02:00:00 PM -$82,348 Mae Hail, Mylie Schmidt
,Ayden Beil
0312_win_loss_player_data:08:00:00 PM -$65,792 Tallulah Rawlings,Josie
Dawe, Mylie Schmidt,Hakim Stott, Esther Callaghan, Ciaron Villanueva
0312_win_loss_player_data:11:00:00 PM -$88,229 Vlad Hatfield,Kerys Fraz
ier,Mya Butler, Mylie Schmidt,Lex Oakley,Elin Wormald
0315_win_loss_player_data:05:00:00 AM -$82,844 Arjan Guzman,Sommer Mann
,Mylie Schmidt
0315_win_loss_player_data:08:00:00 AM -$97,001 Lilianna Devlin,Brendan
Lester, Mylie Schmidt,Blade Robertson,Derrick Schroeder
0315_win_loss_player_data:02:00:00 PM -$182,419 Mylie Schmidt, Corey Hu
ffman
grep: Notes_Player_Analysis: Is a directory
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$

```



```
sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Pla...
File Edit View Search Terminal Help
mkdir: cannot create directory 'Roulette_Losses': File exists
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$ ls
0310_win_loss_player_data  0315_win_loss_player_data  Roulette_Losses
0312_win_loss_player_data  Notes_Player_Analysis
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$ cat Roulette_Losses
0310_win_loss_player_data:05:00:00 AM  -$82,348      Amirah Schneider,Nola Po
rtillo, Mylie Schmidt,Suhayb Maguire,Millicent Betts,Avi Graves
0310_win_loss_player_data:08:00:00 AM  -$97,383      Chanelle Tapia, Shelley
Dodson , Valentino Smith, Mylie Schmidt
0310_win_loss_player_data:02:00:00 PM  -$82,348      Jaden Clarkson, Kaidan S
heridan, Mylie Schmidt
0310_win_loss_player_data:08:00:00 PM  -$65,348      Mylie Schmidt, Trixie Ve
lasquez, Jerome Klein ,Rahma Buckley
0310_win_loss_player_data:11:00:00 PM  -$88,383      Mcfadden Wasim, Norman C
ooper, Mylie Schmidt
0312_win_loss_player_data:05:00:00 AM  -$182,300     Montana Kirk, Alysia Goo
dman, Halima Little, Etienne Brady, Mylie Schmidt
0312_win_loss_player_data:08:00:00 AM  -$97,383      Rimsha Gardiner,Fern Cle
veland, Mylie Schmidt,Kobe Higgins
0312_win_loss_player_data:02:00:00 PM  -$82,348      Mae Hail, Mylie Schmidt
,Ayden Beil
0312_win_loss_player_data:08:00:00 PM  -$65,792      Tallulah Rawlings,Josie
Dawe, Mylie Schmidt,Hakim Stott, Esther Callaghan, Ciaron Villanueva
0312_win_loss_player_data:11:00:00 PM  -$88,229      Vlad Hatfield,Kerys Fraz
ier,Mya Butler, Mylie Schmidt,Lex Oakley,Elin Wormald
0315_win_loss_player_data:05:00:00 AM  -$82,844      Arjan Guzman,Sommer Mann
,Mylie Schmidt
0315_win_loss_player_data:08:00:00 AM  -$97,001      Lilianna Devlin,Brendan
Lester, Mylie Schmidt,Blade Robertson,Derrick Schroeder
0315_win_loss_player_data:02:00:00 PM  -$182,419     Mylie Schmidt, Corey Hu
ffman
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/P
layer_Analysis$
```

Record in the Notes_Player_Analysis file:

The times the losses occurred on each day. If there is a certain player that was playing during each of those times. The total count of times this player was playing.

```

gation/Player_Analysis$ clear

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investi
gation/Player_Analysis$ grep 'Mylie Schmidt' Roulette_Losses
0310_win_loss_player_data:05:00:00 AM -$82,348 Amirah Schneider
,Nola Portillo, Mylie Schmidt,Suhayb Maguire,Millicent Betts,Avi Graves
0310_win_loss_player_data:08:00:00 AM -$97,383 Chanelle Tapia,
Shelley Dodson , Valentino Smith, Mylie Schmidt
0310_win_loss_player_data:02:00:00 PM -$82,348 Jaden Clarkson,
Kaidan Sheridan, Mylie Schmidt
0310_win_loss_player_data:08:00:00 PM -$65,348 Mylie Schmidt, T
rixie Velasquez, Jerome Klein ,Rahma Buckley
0310_win_loss_player_data:11:00:00 PM -$88,383 Mcfadden Wasim,
Norman Cooper, Mylie Schmidt
0312_win_loss_player_data:05:00:00 AM -$182,300 Montana Kirk, Al
ysia Goodman, Halima Little, Etienne Brady, Mylie Schmidt
0312_win_loss_player_data:08:00:00 AM -$97,383 Rimsha Gardiner,
Fern Cleveland, Mylie Schmidt,Kobe Higgins
0312_win_loss_player_data:02:00:00 PM -$82,348 Mae Hail, Mylie
Schmidt,Ayden Beil
0312_win_loss_player_data:08:00:00 PM -$65,792 Tallulah Rawling
s,Josie Dawe, Mylie Schmidt,Hakim Stott, Esther Callaghan, Ciaron Villan
ueva
0312_win_loss_player_data:11:00:00 PM -$88,229 Vlad Hatfield,Ke
rys Frazier,Mya Butler, Mylie Schmidt,Lex Oakley,Elin Wormald

```

Complete the dealer analysis

Navigate to the Dealer_Analysis directory

This file contains the dealer schedules for the various Lucky Duck casino games: Blackjack, Roulette, and Texas Hold 'Em. Using your findings from the player analysis, create a separate script to look at each day and time that you determined losses occurred. Use awk, pipes, and grep to isolate out the following four fields:

Time a.m./p.m. First name of roulette dealer Last name of roulette dealer

```

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ find_by_time.sh
File Edit View Search Terminal Help
GNU nano 2.9.3 find_by_time.sh

#!/bin/bash

cat 0310_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '05:00:00 AM' > Dealers_working_during_losses
cat 0310_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '08:00:00 AM' >> Dealers_working_during_losses
cat 0310_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '02:00:00 PM' >> Dealers_working_during_losses
cat 0310_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '08:00:00 PM' >> Dealers_working_during_losses
cat 0310_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '11:00:00 PM' >> Dealers_working_during_losses
cat 0312_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '05:00:00 AM' >> Dealers_working_during_losses
cat 0312_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '08:00:00 AM' >> Dealers_working_during_losses
cat 0312_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '02:00:00 PM' >> Dealers_working_during_losses
cat 0312_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '08:00:00 PM' >> Dealers_working_during_losses
cat 0312_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '11:00:00 PM' >> Dealers_working_during_losses
cat 0315_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '05:00:00 AM' >> Dealers_working_during_losses
cat 0315_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '08:00:00 PM' >> Dealers_working_during_losses
cat 0315_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep '02:00:00 PM' >> Dealers_working_during_losses

```

For example, if a loss occurred on March 10 at 2 p.m., you would write one script to find the roulette dealer who was working at that specific day and time. Run all of the scripts and append those results to a file called Dealers_working_during_losses.


```

sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis
File Edit View Search Terminal Help
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ clear

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ls
0310_Dealer_schedule  0312_Dealer_schedule  0315_Dealer_schedule  find_by_time.sh
Notes_Dealer_schedule
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ./find_by_time.sh
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ls
0310_Dealer_schedule  0312_Dealer_schedule  0315_Dealer_schedule  Dealers_working_during_losses  find_by_time.sh  Notes_Dealer_schedule
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ cat Dealers_working_during_losses
05:00:00 AM Billy Jones
08:00:00 AM Billy Jones
02:00:00 PM Billy Jones
08:00:00 PM Billy Jones
11:00:00 PM Billy Jones
05:00:00 AM Billy Jones
08:00:00 AM Billy Jones
02:00:00 PM Billy Jones
08:00:00 PM Billy Jones
11:00:00 PM Billy Jones
05:00:00 AM Billy Jones
08:00:00 PM Billy Jones
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ =

```

Preview your file `Dealers_working_during_losses` and analyze the data. The primary dealer working at the times where losses occurred.

How many times the dealer worked when major losses occurred. Complete the player/employee correlation.

```

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Analysis$ cat Notes_Player_Analysis
0310_win_loss_player_data:05:00:00 AM -$82,348 Mylie Schmidt
0310_win_loss_player_data:08:00:00 AM -$97,383 Mylie Schmidt
0310_win_loss_player_data:02:00:00 PM -$82,348 Mylie Schmidt
0310_win_loss_player_data:08:00:00 PM -$65,348 Mylie Schmidt
0310_win_loss_player_data:11:00:00 PM -$88,383 Mylie Schmidt
0312_win_loss_player_data:05:00:00 AM -$182,300 Mylie Schmidt
0312_win_loss_player_data:08:00:00 AM -$97,383 Mylie Schmidt
0312_win_loss_player_data:02:00:00 PM -$82,348 Mylie Schmidt
0312_win_loss_player_data:08:00:00 PM -$65,792 Mylie Schmidt
0312_win_loss_player_data:11:00:00 PM -$88,229 Mylie Schmidt
0315_win_loss_player_data:05:00:00 AM -$82,844 Mylie Schmidt
0315_win_loss_player_data:08:00:00 AM -$97,001 Mylie Schmidt
0315_win_loss_player_data:02:00:00 PM -$182,419 Mylie Schmidt
13 65 870 Notes_Player_Analysis
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Analysis$ grep 'Mylie Schmidt' Roulette_Losses | wc -l
13
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Analysis$

```

In the notes file of the Player_Dealer_Correlation directory, add a summary of your findings noting the player and dealer you believe are colluding to scam Lucky Duck. Make sure to document your specific reasons for this finding.

```

The End of the Road Terminal Help
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ ls
Dealer_Analysis  Player_Analysis  Player_Dealer_Correlation  Week.zip
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ cd Player_Dealer_Correlation/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Dealer_Correlation$ ls
Dealers_working_during_losses  Notes_Dealer_schedule  Notes_Player_Analysis  Player_Dealer_Correlation_Notes  Roulette_Losses
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Dealer_Correlation$ cat Player_Dealer_Correlation_Notes
Dealer schedule date and time
0310_Dealer_schedule:05:00:00 AM      Billy Jones
0310_Dealer_schedule:08:00:00 AM      Billy Jones
0310_Dealer_schedule:02:00:00 PM      Billy Jones
0310_Dealer_schedule:08:00:00 PM      Billy Jones
0310_Dealer_schedule:11:00:00 PM      Billy Jones
0312_Dealer_schedule:05:00:00 AM      Billy Jones
0312_Dealer_schedule:08:00:00 AM      Billy Jones
0312_Dealer_schedule:02:00:00 PM      Billy Jones
0312_Dealer_schedule:08:00:00 PM      Billy Jones
0312_Dealer_schedule:11:00:00 PM      Billy Jones
0315_Dealer_schedule:05:00:00 AM      Billy Jones
0315_Dealer_schedule:08:00:00 AM      Billy Jones
0315_Dealer_schedule:02:00:00 PM      Billy Jones

player winnings date and time
0310_win_loss_player_data:05:00:00 AM  -$82,348      Mylie Schmidt
0310_win_loss_player_data:08:00:00 AM  -$97,383      Mylie Schmidt
0310_win_loss_player_data:02:00:00 PM  -$82,348      Mylie Schmidt
0310_win_loss_player_data:08:00:00 PM  -$65,348      Mylie Schmidt
0310_win_loss_player_data:11:00:00 PM  -$88,383      Mylie Schmidt
0312_win_loss_player_data:05:00:00 AM  -$182,300     Mylie Schmidt
0312_win_loss_player_data:08:00:00 AM  -$97,383      Mylie Schmidt
0312_win_loss_player_data:02:00:00 PM  -$82,348      Mylie Schmidt
0312_win_loss_player_data:08:00:00 PM  -$65,792      Mylie Schmidt
0312_win_loss_player_data:11:00:00 PM  -$88,229      Mylie Schmidt
0315_win_loss_player_data:05:00:00 AM  -$82,844      Mylie Schmidt
0315_win_loss_player_data:08:00:00 AM  -$97,001      Mylie Schmidt
0315_win_loss_player_data:02:00:00 PM  -$182,419     Mylie Schmidt

As you can see my findings notes above, the Dealer named billy jones was working
the same time and date the player name Mylie Schmidt was playing in the casino.
this two billy and mylie work together when the lucky duck casino lost the money.
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Dealer_Correlation$

```

Step 4: Scripting Your Tasks

You manager is impressed with the work you have done so far on the investigation. They tasked you with building a shell script that can easily analyze future employee schedules. They will use this to determine which employee was working at a specific time in the case of future losses. Complete the following tasks:

Remain in the Dealer_Analysis directory. Develop a shell script called roulette_dealer_finder_by_time.sh

```

File Edit View Search Terminal Help
GNU nano 2.9.3 roulette_dealer_finder_by_time.sh

#!/bin/bash
cat $1_Dealer_schedule | awk -F " " '{print $1, $2, $5, $6}' | grep "$2"

```

that can analyze the employee schedule to easily find the roulette dealer at a specific time. Hint: You will be using a script similar to the one you created for the dealer analysis step, but you will not output the results into a file.

Design the shell script to accept the following two arguments: One for the date (four digits) One for the time Note: The argument should be able to accept a.m. or p.m. Test your script on the schedules to confirm it outputs the correct dealer at the time specified.

```

sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ls
0310_Dealer_schedule 0312_Dealer_schedule 0315_Dealer_schedule roulette_dealer_finder_by_time_and_game.sh roulette_dealer_finder_by_time.sh
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ./roulette_dealer_finder_by_time.sh 0310 '05:00:00 AM'
05:00:00 AM Billy Jones
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$

```


Bonus

In case there is future fraud on the other Lucky Duck games, create a shell script called `roulette_dealer_finder_by_time_and_game.sh` that has the three following arguments: Specific time
Specific date Casino game being played

```
sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis
File Edit View Search Terminal Help
GNU nano 2.9.3 roulette_dealer_finder_by_time_and_game.sh
/bin/bash
cat $1_Dealer_schedule | awk -F " " '{print "Black Jack dealer: " $3, $4, "| Roulette dealer: " $5, $6, "| Texas Hold EM dealer: " $7, $8, "were all working during the " $1, $2, "shift."}' | grep "$2"
```

```
sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis
File Edit View Search Terminal Help
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$ ./roulette_dealer_finder_by_time_and_game.sh 0310 '05:00:00 AM'
Black Jack dealer: Katey Bean | Roulette dealer: Billy Jones | Texas Hold EM dealer: Evalyn Howell were all working during the 05:00:00 AM shift.
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Dealer_Analysis$
```

Submission Guidelines

Move the following to the `Player_Dealer_Correlation` directory:

All note files Evidence files: `Roulette_Losses` `Dealers_working_during_losses` Shell script(s) Compress the `Player_Dealer_Correlation` folder to a zip file and submit it.

```
Dealer_Analysis Player_Analysis Player_Dealer_Correlation Player_Dealer_Correlation.zip
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ cd Player_Dealer_Correlation/
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Dealer_Correlation$ ls
Dealers_working_during_losses find_by_time.sh Notes_Dealer_schedule Notes_Player_Analysis Player_Dealer_Correlation_Notes Roulette_Losses
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation/Player_Dealer_Correlation$
```

```
sysadmin@UbuntuDesktop: ~/Lucky_Duck_Investigations/Roulette_Loss_Investigation
File Edit View Search Terminal Help
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ ls
Dealer_Analysis Player_Analysis Player_Dealer_Correlation
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ zip Player_Dealer
Correlation.zip Player_Dealer_Correlation/
adding: Player_Dealer_Correlation/ (stored 0%)
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ ls
Dealer_Analysis Player_Analysis Player_Dealer_Correlation Player_Dealer_Correlation.zip
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$ ls
Dealer_Analysis Player_Analysis Player_Dealer_Correlation Player_Dealer_Correlation.zip
sysadmin@UbuntuDesktop:~/Lucky_Duck_Investigations/Roulette_Loss_Investigation$
```