

Final Homework3

Bash Scripting

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Company ABC has uncontrolled process of employee's accounts creation. Currently process means adding names, email and other personal data manually to the `accounts.csv` file without any rules.

Department head has decided to improve it based on the naming convention implementation. Good idea for newcomers, but what to do with current user's list? You have been asked to help. Could you please develop automated way (bash script) and create new `accounts_new.csv` file based on current `accounts.csv` and below.

1) Need to update column **userid** between columns **name** and **title**

- Name format: first letter of name lowercase and all other letters of surname lowercase. **Example:** name - *Susan Houston*; userid - *shouston*.

2) **userid** must be unique

- in case of **userid** is the same as existing one you should create **userid** that contains numbers like 1, 2 etc.

Example: imagine, you have already created **userid** from previous step – *shouston*. **userid** for Sean Houston will be *shouston1*. For name *Sonia Houston*, userid is *shouston2* etc.

The screenshot shows a terminal window titled 'devops@localhost:~' with a bash script being executed. The script processes 'accounts.csv' and creates 'accounts_new.csv'. It uses various shell commands like 'head', 'sed', 'while read', 'awk', 'tr', 'sort', and 'uniq' to transform the data. The script extracts fields like name, location, org, serv, email, title, and department, and generates a new 'userid' based on the name and title, ensuring uniqueness by appending a counter if necessary.

On the right side of the terminal, there is a desktop overlay showing the date and time: 10:05:25, 7 сентября 2022 г. Below this is a calendar for September 2022, with the 7th highlighted. At the bottom right, there is a notification area with the text 'Сегодня' and 'Настройте календарь, чтобы видеть запланированные события', along with a button labeled 'Начало работы'.

```
devops@localhost:~  
File Edit View Search Terminal Help  
#creating accounts_new.csv  
mas=()  
while read -r line; do  
usr_id=$(echo $line | awk -F, '{print $6}')array_of_userid+=($usr_id)  
done < $file2  
repeated_userid=($(for i in "${array_of_userid[@]}"; do echo $i; done | sort | uniq -D | uniq  
)  
k=($(for i in "${array_of_userid[@]}"; do echo $i; done | sort | uniq -c | sort -r -k1 | head  
-n1 | awk '{print $1}')for i in ${repeated_userid[@]}  
do  
for (( j=1; j<=k; j++ ))  
do  
#creating userid with numbers  
sed -i "0,/${i}/${i}$j",/" accounts_new.csv  
done  
done  
#changing first line in accounts_new.csv  
sed -i '2d' accounts_new.csv  
  
[devops@localhost ~]$ ./Final_Homework3_BashScripting.sh  
[devops@localhost ~]$ cat accounts_new.csv  
id,location id,organization id,service id,name,userid,title,email,department
```

10:05:49

7 сентября 2022 г.

Сентябрь 2022

Пн	Вт	Ср	Чт
29	30	31	1
5	6	7	8
12	13	14	15
19	20	21	22
26	27	28	29

```
devops@localhost:~  
File Edit View Search Terminal Help  
done  
#changing first line in accounts_new.csv  
sed -i '2d' accounts_new.csv  
  
[devops@localhost ~]$ ./Final_Homework3_BashScripting.sh  
[devops@localhost ~]$ cat accounts_new.csv  
id,location id,organization id,service id,name,userid,title,email,department  
1,1,,,Susan Houston,shouston1,Director of Services,,  
2,1,,,Christina Gonzalez,cgonzalez,Director,,  
3,2,,,Brenda brown,bbrown,"Director, Second Career Services",,  
4,3,,,Howard Lader,hlader,"Manager, Senior Counseling",,  
5,4,,,Kimberly Pesavento,kpesavento,Commercial director,,  
6,5,,,Joe Bloom,jbloom,Financial Empowerment Programs Program Director,,  
7,6,,,peter Olson,polson,Director,,  
8,6,,,Bart Charlow,bcharlow1,Executive Director,,  
9,7,,,Bart Charlow,bcharlow2,Executive Director,,  
10,7,,,Barbara Kalt,bkalt,Director,,  
11,8,,,Marilyn Baker-Venturini,mbaker-venturini,Director,,  
12,8,,,Graciela Hernandez,ghernandez,Assistant Manager,,  
13,8,,,Julie avelino,javelino,Assessment Specialist,,  
14,9,,,Dave Genesy,dgenesyl,Library Director,,  
15,9,,,maria kramer,mkramer1,Library Divisions Manager,,  
16,10,,,Dave Genesy,dgenesy2,tester,,  
17,10,,,Maria kramer,mkramer2,Library Division Manager,,  
18,11,,,Dave Genesy,dgenesy3,Head of office,,  
19,11,,,Elizabeth Meeks,emeeks1,Branch Manager,,  
20,12,,,Kathy Endaya,kendaya,Director,,  
21,13,,,dave genesy,dgenesy4,Library Director,,  
22,14,,,Andres Espinoza,aespinoza,"Manager, Commanding Officer",,  
23,15,,,Jack Phillips,jphillips,Administrator,,  
24,16,,,James Lee,jlee,Commanding Officer,,  
25,17,,,Kenneth Gibson,kgibson,tester,,  
26,18,,,Sharon Petersen,spetersen1,Administrator,,  
27,19,,,Sharon Petersen,spetersen2,Administrator,,  
28,21,,,Moncef Salah,msalah,tester,,Office of Innovation  
29,22,,,Suzanne Badenhoop,sbadenhoop,tester,suzanne@example.com,Referrals  
30,20,,,Sean Houston,shouston2,Director of new Services,,  
31,8,,,David Genesy,dgenesy5,Account Manager,,  
32,,8,,Elizabeth Feeney,efeeney,CEO,e.feeney@foobar.org,Operations  
33,,8,,Erika Meeks,emeeks2,tester,e.meeks@foobar.org,Operations  
36,,,22,Joe Smith,jsmith,third-party,john.smith@example.org,third-party Applications  
[devops@localhost ~]$
```

10:06:02

7 сентября 2022 г.

Сентябрь 2022

Пн	Вт	Ср	Чт
29	30	31	1
5	6	7	8
12	13	14	15
19	20	21	22
26	27	28	29
3	4	5	6

Сегодня

Настройте календар
видеть запланирова
события

Начало раб