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Batch: F1

Subject: Operating System (OS)

Subject Code: 2CS506

Practical 5

Practical :

Write a shell script for performing basic functions related to DBMS (Create a menu driven program for various database operations; handling of internal command error should also be done. Use of various filter commands is required)

```
while true

do

echo "1. Create database"

echo "2. View database"

echo "3. Insert data into database"

echo "4. Delete data from database"

echo "5. Update database"

echo "6. Search from database"

echo "7. Sorting database"

echo "8. exit"


read choice


case $choice in

1)

echo "Name of Database"

read name

while [ -f $name ]

do

echo "$name Database is exist"

echo "Try different name"

read name

done

touch $name
```

```bash
echo "Created successfully"
;;
2)
echo "Enter the name of database"
read name
while [ ! -f $name ]
do
echo "This named database do not exist"
read name
done
cat $name
;;
3)
echo "Enter the name of database"
read name
while [ ! -f $name ]
do
echo "This named database do not exist"
read name
done
echo "Enter Roll no"
read roll
check=`grep -c "$roll" "$name"`
while [ $check -eq 1 ]
do
echo "This roll no already exist, Please enter another Roll no"
read roll
check=`grep -c "$roll" "$name"`
done
```

```
echo "Enter the name"

read stuname

echo "Enter CPI"

read cpi

echo "Enter City"

read city

echo "$roll | $stuname | $cpi | $city" | cat >> $name

;;

4)

echo "Enter name of database"

read dbname

while [ ! -f $dbname ]

do

echo "Enter another name of database"

read dbname

done

echo "Enter your choice"

echo "1 Delete by Rollno"

    echo "2 Delete by Name"

        echo "choose ex for exit"

read choosenopt

case $choosenopt in

1)

echo "Enter roll no that you want to delete"

read roll

check=$(grep -c "$roll" "$dbname")

while [ $check -ne 1 ]

do

echo "Please change roll no"
```

```
read roll
check=$(grep -c "$roll" "$dbname")
done
sed -i "/$roll/d""$dbname"
echo "Delete successfully"
cat "$dbname"
;;
2)
echo "Enter name that you want to delete"
read name
check=$(grep -c "|$name|" "$dbname")
while [ $check -ne 1 ]
do
echo "Please select other name"
read name
check=$(grep -c "|$name|""$dbname")
done
sed -i"/|$name|/d""$dbname"
echo "Delete successfully"
cat "$dbname"
;;
3 | ex)
break
;;
esac
;;
5)
echo "Enter the name of database"
read dbname
```

```
while [ ! -f $dbname ];

do

echo "Please change database name"

read dbname

done

echo "Enter roll no whose record you want to change"

read changeroll

check=$(grep -c "$changeroll" "$dbname")

while [ $check -eq 1 ]

do

echo "Please change roll no"

read changeroll

check=$(grep -c "$changeroll" "$dbname")

done

grep -v "$changeroll" "$dbname" > temp

mv temp "$dbname"

echo "Enter Roll no"

read rollno

echo "Enter name"

read n

echo "Enter CPI"

read cpi

echo "Ente city"

read city

check1=&(grep -c "$rollno" "$dbname")

if [ $check1 -eq 1 ];

then

echo "Something went wrong"

else
```

```
echo "$rollno | $n | $cpi | $city" >> "$dbname"

echo "Successfully inserted"

fi

;;

6)

echo "Enter the name of database"

read name

while [ ! -f $name ]

do

echo "Please change db name"

read name

done

echo "Enter searching word"

read word

check=`grep -c "$word" "$name"`

if [ $check -eq 0 ];

then

echo "Not found"

else

echo "$word"

echo "found"

fi

;;

7)

echo "Enter name of database"

read dbname

while [ ! -f $dbname ]

do

echo "Please change db name"
```

```
read dbname
done
while true; do
echo "1 Roll no"
echo "2 Name"
echo "3 CPI"
echo "4 City"
echo "5 exit"
read choice
case $choice in
1) sort -k1 "$dbname";;
2) sort -k2 "$dbname";;
3) sort -k3 "$dbname";;
4) sort -k4 "$dbname";;
5) break ;;
*) echo "Invalid, please choose valid option" ;;
esac
done
;;
8)
break
;;
esac
done
```

Output:

```
swekit@swekit:~/Documents/Practical/5$ sh file.sh
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
1
Name of Database
Class
Created successfully
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
3
Enter the name of database
Class
Enter Roll no
1
Enter the name
Swekit
Enter CPI
7
Enter City
Ahmedabad
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
2
Enter the name of database
Class
1 | Swekit | 7 | Ahmedabad
2 | Rudra | 9 | Surat
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
4
Enter name of database
Class
Enter your choice
1 Delete by Rollno, 2 Delete by Name, choose ex for exit
1
Enter roll no that you want to delete
1
Delete successfully
2 | Rudra | 9 | Surat
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
5
Enter the name of database
Class
Enter roll no whose record you want to change
2
Please change roll no
1
Enter Roll no
1
Enter name
Swekit
Enter CPI
8
Ente city
amd
0
file sh: 135: [:    eq: unexpected operator
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
6
Enter the name of database
Class
Enter searching word
amd
amd
found
```

```
1. Create database
2. View database
3. Insert data into database
4. Delete data from database
5. Update database
6. Search from database
7. Sorting database
8. exit
7
Enter name of database
Class
1 Roll no
2 Name
3 CPI
4 City
5 exit
2
2 | Rudra | 9 | Surat
1 | Swekit | 8 | amd
1 Roll no
2 Name
3 CPI
4 City
5 exit
```