## **GREP command in UNIX**

### root@MUM084:~# cd Desktop

# root@MUM084:~/Desktop# ls

expressiontree.c~ linkedlistt.c~ s2179.c~ a.out bank.lst heap.c~ LL1.c~ sadfs.c~ bank.txt heapsort.c~ LL.c~ shachi bfs.c~ infix.c~ Mergesort.txt~ SJF1.c~ BFS.c~ Infixtopostfix.c~ newbank.lst SJF.c~

clist.lst instr.fil Que.c~ SRTN.c~

convolution.java~ ITU.java~ queue.c~ SRTN.C~ dequeue.c~ ks.java~ queuelist.c~ Untitled Folder

Expression.c~ linkedlist.c~ round.c~

### root@MUM084:~/Desktop# man grep

### root@MUM084:~/Desktop# cat bank.lst

101 Aditya 0 14/11/2000 current 102 Anil 10000 20/05/2011 saving

103 Naman0 20/08/2009 current

104 Ram 10000 15/08/2010 saving

105 Jyotsna 5000 16/06/2012 saving

106 Mukesh 14000 20/12/2009 Current

107 Vishal 14500 30/11/2011 saving

108 Chirag 0 15/12/2012 Current

109 Arva 16000 14/12/2010 Current

110 Priya 130 16/11/2009 Saving

### Search lines containing the pattern 'mu' in file bank.lst

root@MUM084:~/Desktop# grep mu bank.lst

Since mu is not there in bank.lst, it displays nothing on screen

### Search lines containing the pattern 'Mu' in file bank.lst

root@MUM084:~/Desktop# grep Mu bank.lst

106 Mukesh 14000 20/12/2009 Current

#### Search lines containing the pattern 'current' in file bank.lst

root@MUM084:~/Desktop# grep current bank.lst

101 Aditya 0 14/11/2000 current 103 Naman0 20/08/2009 current

### Search lines containing the pattern 'Current' in file bank.lst

root@MUM084:~/Desktop# grep Current bank.lst

106 Mukesh 14000 20/12/2009 Current

108 Chirag 0 15/12/2012 Current 109 Arya 16000 14/12/2010 Current

# Search lines containing the pattern 'Mu' in file bank.lst and bnk.lst

root@MUM084:~/Desktop# grep Current bank.lst bnk.lst

```
bank.lst:106 Mukesh
                            14000 20/12/2009
                                                 Current
bank.lst:108 Chirag 0
                            15/12/2012
                                          Current
bank.lst:109 Arya 16000 14/12/2010
                                          Current
grep: bnk.lst: No such file or directory
Search lines containing the pattern 'Chirag' in file bank.lst
root@MUM084:~/Desktop# grep 'Chirag' bank.lst
108
                     15/12/2012
       Chirag 0
                                   Current
                                              OR
root@MUM084:~/Desktop# grep Chirag bank.lst
       Chirag 0
                     15/12/2012
108
                                   Current
Count the number of lines containing the pattern 'Current' in file bank.lst
root@MUM084:~/Desktop# grep -c Current bank.lst
3
Count the number of lines containing the pattern 'current' in file bank.lst
root@MUM084:~/Desktop# grep -c current bank.lst
2
Display line numbers along with lines containing the pattern 'current' in file bank.lst
root@MUM084:~/Desktop# grep -n current bank.lst
1:101 Aditya 0
                     14/11/2000
3:103 Naman0
                     20/08/2009
                                   current
Display llines not containing the pattern 'current' in file bank.lst
root@MUM084:~/Desktop# grep -v current bank.lst
102
              10000 20/05/2011
       Anil
                                   saving
104
       Ram
             10000 15/08/2010
                                   saving
105
                     5000 16/06/2012
       Jyotsna
                                          saving
106
       Mukesh
                     14000 20/12/2009
                                          Current
107
       Vishal 14500 30/11/2011
                                   saving
108
       Chirag 0
                     15/12/2012
                                   Current
109
       Arya 16000 14/12/2010
                                   Current
       Priya 130
110
                     16/11/2009
                                   Saving
List the file names containing the pattern 'current' in file bank.lst
root@MUM084:~/Desktop# grep -l current *.lst
bank.lst
clist.lst
newbank.lst
List the file names not containing the pattern 'current' in file bank.lst
root@MUM084:~/Desktop# grep -L current *.java~
convolution.java~
ITU.java~
ks.java~
Search lines containing the pattern 'Current' or 'current' in file bank.lst (i.e. case insensitive)
root@MUM084:~/Desktop# grep -i current bank.lst
```

101

103

Aditya 0

Naman0

14/11/2000

20/08/2009

current

current

```
106
       Mukesh
                    14000 20/12/2009
                                         Current
108
       Chirag 0
                    15/12/2012
                                  Current
109
       Arya 16000 14/12/2010
                                  Current
Search lines containing the pattern 'Current' or 'current' in file bank.lst (i.e. case insensitive)
Here -e is used to indicate OR.
root@MUM084:~/Desktop# grep -e current -e Current bank.lst
       Aditya 0
101
                    14/11/2000
                                  current
103
       Naman0
                    20/08/2009
                                  current
                    14000 20/12/2009
106
       Mukesh
                                         Current
108
       Chirag 0
                    15/12/2012
                                  Current
       Arya 16000 14/12/2010
109
                                  Current
Prints 2 lines before and after the line containing pattern 'Jyotsna'
root@MUM084:~/Desktop# grep -2 -i Jyotsna bank.lst
103
       Naman0
                    20/08/2009
                                  current
104
       Ram 10000 15/08/2010
                                  saving
105
       Jyotsna
                    5000 16/06/2012
                                         saving
106
       Mukesh
                    14000 20/12/2009
                                         Current
107
       Vishal 14500 30/11/2011
                                  saving
Prints 2 lines before and after the line containing pattern 'current' or 'Current'
root@MUM084:~/Desktop# grep -2 -i current bank.lst
101
       Aditva 0
                    14/11/2000
                                  current
102
       Anil
             10000 20/05/2011
                                  saving
103
       Naman<sub>0</sub>
                    20/08/2009
                                  current
       Ram 10000 15/08/2010
104
                                  saving
105
                    5000 16/06/2012
       Jyotsna
                                         saving
106
                    14000 20/12/2009
       Mukesh
                                         Current
107
       Vishal 14500 30/11/2011
                                  saving
108
       Chirag 0
                    15/12/2012
                                  Current
109
       Arya 16000 14/12/2010
                                  Current
110
       Priya 130
                    16/11/2009
                                  Saving
Prints 2 lines before and after the line containing pattern 'Priya'
root@MUM084:~/Desktop# grep -2 -i Priya bank.lst
       Chirag 0
                    15/12/2012
                                  Current
108
109
       Arya 16000 14/12/2010
                                  Current
110
       Priya 130
                    16/11/2009
                                  Saving
                                         OR
root@MUM084:~/Desktop# grep -2 -i priya bank.lst
108
       Chirag 0
                    15/12/2012
                                  Current
109
       Arya 16000 14/12/2010
                                  Current
110
       Priya 130
                    16/11/2009
                                  Saving
Prints lines containing letter 'r'
root@MUM084:~/Desktop# grep r bank.lst
101
       Aditya 0
                    14/11/2000
                                  current
103
       Naman0
                    20/08/2009
                                  current
```

106	Mukesh	14000 20/12/	/2009 Current	
108	Chirag 0	15/12/2012		
109		14/12/2010	Current	
110	Priya 130		Saving	
110	111ya 150	10/11/2005	Javing	
			OR	
root@	MUM084:~/De	eskton# gren "i	r" hank lst	
1001@	Aditya 0	14/11/2000	current	
103	Naman 0	20/08/2009		
106		14000 20/12/		
108		15/12/2012		
109	•	14/12/2010	Current	
110	Priya 130	16/11/2009	Saving	
110	111ya 150	10/11/2005	Suving	
Prints	lines containin	ıg letter 'd'		
root@	MUM084:~/De	esktop# grep "	d" bank.lst	
101	Aditya 0	14/11/2000	current	
	lines containin			
root@	MUM084:~/De	esktop# grep "	D" bank.lst	
Dianla	all wa aawda Ala	-+ h d	and house letter IDI	
_	•		not have letter 'D'	
	MUM084:~/De			
101	Aditya 0	14/11/2000		
102	Anil 10000		saving	
103		20/08/2009		
104		15/08/2010	O	
105	Jyotsna		U	
106		14000 20/12/		
107	Vishal 14500		saving	
108	Chirag 0	15/12/2012	Current	
109	Arya 16000		Current	
110	Priya 130	16/11/2009	Saving	
Dienle	y all records th	at have or do r	not have letter 'b'	
	MUM084:~/De			
1001@	Aditya 0	14/11/2000		
101		20/05/2011	saving	
102		20/03/2011	•	
103				
104	Jyotsna		saving /2012 saving	
105	Mukesh		_	
	Vishal 14500			
107			saving	
108	Chirag 0		Current	
109	Arya 16000		Current	
110	Priya 130	16/11/2009	Saving	
Display all records starting with 1				
root@MUM084:~/Desktop# grep "^1" bank.lst				
1001@	Aditya 0	14/11/2000	current	
101		20/05/2011		
102	71111 10000	20/00/2011	54 1115	

103	Naman0		20/08/2009		current	
104	Ram	10000	15/08/2	2010	saving	
105	Jyotsna		5000	16/06/	2012	saving
106	Mukesh		14000	20/12/	2009	Current
107	Vishal	14500	30/11/2	2011	saving	
108	Chirag	0	15/12/2	2012	Curren	t
109	Arya	16000	14/12/2	2010	Curren	t
110	Priya	130	16/11/2	2009	Saving	

### Display all records ending with 'nt'

root@MUM084:~/Desktop# grep "nt\$" bank.lst Aditva 0 14/11/2000 current Naman0 103 20/08/2009 current Mukesh 106 14000 20/12/2009 Current 108 Chirag 0 15/12/2012 Current 109 Arya 16000 14/12/2010 Current

### Display all records starting with 11

root@MUM084:~/Desktop# grep "^11" bank.lst 110 Priva 130 16/11/2009 Saving

### Display all records containing Current or current

root@MUM084:~/Desktop# grep [Cc]urrent bank.lst 101 Aditya 0 14/11/2000 current Naman0 103 20/08/2009 current 106 Mukesh 14000 20/12/2009 Current 108 Chirag 0 15/12/2012 Current 109 Arya 16000 14/12/2010 Current

### Display all records containing current without the file names on its left

root@MUM084:~/Desktop# grep -h current bank.lst

101 Aditya 0 14/11/2000 current 103 Naman0 20/08/2009 current

### Display all records containing current from all .lst files with file names on its left.

root@MUM084:~/Desktop# grep -H current \*.lst bank.lst:101 Aditya 0 14/11/2000 current bank.lst:103 Naman0 20/08/2009 current clist.lst:101 Aditya 0 14/11/2000 current clist.lst:103 Naman0 20/08/2009 current newbank.lst:101 Aditya 0 14/11/2000 current newbank.lst:103 20/08/2009 Naman<sub>0</sub> current

# Display all records containing pattern current. Five dots (....) implies that any five characters having 'nt' at the end are displayed.

root@MUM084:~/Desktop# grep .....nt bank.lst Aditya 0 101 14/11/2000 current 103 Naman0 20/08/2009 current 14000 20/12/2009 106 Mukesh Current 108 Chirag 0 15/12/2012 Current 109 Arya 16000 14/12/2010 Current

```
root@MUM084:~/Desktop# grep ...ya bank.lst
                                 current
101
      Aditya 0
                    14/11/2000
109
      Arya 16000 14/12/2010
                                 Current
110
      Priya 130
                    16/11/2009
                                 Saving
root@MUM084:~/Desktop# grep ...ya bank.lst
101
      Aditya 0
                    14/11/2000
                                 current
109
      Arva 16000 14/12/2010
                                 Current
110
      Priya 130
                    16/11/2009
                                 Saving
root@MUM084:~/Desktop# grep ....ya bank.lst
      Aditya 0
                                 current
101
                    14/11/2000
109
      Arva 16000 14/12/2010
                                 Current
110
      Priya 130
                    16/11/2009
                                 Saving
root@MUM084:~/Desktop# grep .....ya bank.lst
101
      Aditya 0
                    14/11/2000
                                 current
109
      Arya 16000 14/12/2010
                                 Current
110
      Priya 130
                    16/11/2009
                                 Saving
root@MUM084:~/Desktop# grep .....ya bank.lst
101
      Aditya 0
                    14/11/2000
                                 current
109
      Arva 16000 14/12/2010
                                 Current
110
      Priya 130
                    16/11/2009
                                 Saving
root@MUM084:~/Desktop# grep ......ya bank.lst
101
      Aditya 0
                    14/11/2000
                                 current
110
      Priya 130
                    16/11/2009
                                 Saving
```

### Display all records containing pattern di.ya (a letter between di and ya)

root@MUM084:~/Desktop# grep di.ya bank.lst 101 Aditya 0 14/11/2000 current

root@MUM084:~/Desktop# grep A.a bank.lst

Display all records containing pattern that starts with A, ends with a and inbetween contains any two letters.

```
root@MUM084:~/Desktop# grep A..a bank.lst
109 Arya 16000 14/12/2010 Current
root@MUM084:~/Desktop# grep A....a bank.lst
101 Aditya 0 14/11/2000 current
```

Display all records containing pattern that starts with A, ends with a and inbetween contains any number of characters.

```
root@MUM084:~/Desktop# grep A.*a bank.lst
101 Aditya 0 14/11/2000 current
102 Anil 10000 20/05/2011 saving
109 Arya 16000 14/12/2010 Current
```

Write the pattern to be searched in a file pattern.txt. Pass this file using -f option in grep command

### from where pattern will be read and searched.

root@MUM084:~/Desktop# cat >pattern.txt
current

Saving

 $\wedge d$ 

root@MUM084:~/Desktop# grep -f pattern.txt bank.lst

### root@MUM084:~/Desktop# grep -f pattern.txt bank.lst

101	Aditya 0	14/11/2000	current	
103	Naman0	20/08/2009	current	
110	Priya 130	16/11/2009	Saving	

### Append few records as shown below to bank.lst file

```
root@MUM084:~/Desktop# cat >> bank.lst
201 Bina 3000 11/03/2010 saving
202 Diya 4000 13/04/2018 Saving
203 Gargi 2000 21/01/2015 current
```

### Check the contents of file.

root@MUM084:~/Desktop# cat bank.lst						
101	Aditya 0		14/11/2000		current	
102	Anil	10000	20/05/2	2011	saving	
103	Naman0		20/08/2009		current	
104	Ram	10000	15/08/	2010	saving	
105	Jyotsna		5000	16/06/	2012	saving
106	Mukesh		14000	20/12/	2009	Current
107	Vishal	14500	30/11/2	2011	saving	
108	Chirag 0		15/12/	2012	Curren	t
109	Arya	16000	14/12/	2010	Curren	t
110	Priya	130	16/11/2	2009	Saving	•
201	Bina	3000	11/03/2	2010	saving	
202	Diya	4000	13/04/	2018	Saving	,
203	Gargi	2000	21/01/2	2015	current	t

### List all records whose customer number starts with 2.

If following command is given, it will give wrong output.

```
root@MUM084:~/Desktop# grep 2.. bank.lst
101
      Aditya 0
                   14/11/2000
                                current
102
      Anil
            10000 20/05/2011
                                saving
103
      Naman0
                   20/08/2009
                                current
104
      Ram 10000 15/08/2010
                                saving
105
                   5000 16/06/2012
      Jyotsna
                                      saving
106
      Mukesh
                   14000 20/12/2009
                                      Current
107
      Vishal 14500 30/11/2011
                                saving
108
      Chirag 0
                   15/12/2012
                                Current
109
      Arva 16000 14/12/2010
                                Current
110
      Priya 130
                   16/11/2009
                                Saving
201
      Bina
             3000 11/03/2010
                                saving
```

```
202 Diya 4000 13/04/2018 Saving 203 Gargi 2000 21/01/2015 current
```

Since customer number is the field with which record starts, we must give command that tells to search pattern at the beginning of the line.

```
root@MUM084:~/Desktop# grep ^2 bank.lst
201 Bina 3000 11/03/2010 saving
202 Diya 4000 13/04/2018 Saving
203 Gargi 2000 21/01/2015 current
```

### To negate the above search, place ^ before the square bracket as shown below:

root@MUM084:~/Desktop# grep ^[^2] bank.lst

```
101
      Aditya 0
                    14/11/2000
                                  current
102
             10000 20/05/2011
      Anil
                                  saving
103
      Naman<sub>0</sub>
                    20/08/2009
                                  current
104
      Ram 10000 15/08/2010
                                  saving
105
      Jyotsna
                    5000 16/06/2012
                                        saving
106
      Mukesh
                    14000 20/12/2009
                                        Current
      Vishal 14500 30/11/2011
107
                                  saving
108
      Chirag 0
                    15/12/2012
                                  Current
109
      Arva 16000 14/12/2010
                                  Current
110
      Priya 130
                    16/11/2009
                                  Saving
```

### Following command will list all those records in which 2 occurs anywhere in row.

Current

```
root@MUM084:~/Desktop# grep [^2] bank.lst
                   14/11/2000
101
      Aditya 0
                                current
102
      Anil
             10000 20/05/2011
                                saving
103
      Naman0
                   20/08/2009
                                current
104
      Ram 10000 15/08/2010
                                saving
105
                   5000 16/06/2012
      Jyotsna
                                       saving
106
      Mukesh
                   14000 20/12/2009
                                       Current
107
      Vishal 14500 30/11/2011
                                saving
108
      Chirag 0
                   15/12/2012
                                Current
109
      Arya
            16000 14/12/2010
                                Current
110
      Priya 130
                   16/11/2009
                                Saving
201
      Bina
             3000 11/03/2010
                                saving
202
      Diya
             4000 13/04/2018
                                Saving
203
      Gargi 2000
                   21/01/2015
                                current
Hina
      204
             30000 14/02/2014
                                saving
```

### To print lines which do not start with digit in range 2 to 3

4000 8/9/2007

Kalpana

205

```
root@MUM084:~/Desktop# grep ^[^2-3] bank.lst
101
      ADITYA
                   0
                          14/11/2000
                                      CURRENT
102
            10000 20/05/2011
      Anil
                                saving
103
      Naman0
                   20/08/2009
                                current
104
            10000 15/08/2010
                                saving
      Ram
105
      Jvotsna
                   5000 16/06/2012
                                      saving
106
                   14000 20/12/2009
      Mukesh
                                      Current
107
      Vishal 14500 30/11/2011
                                saving
```

108 Chirag 0 15/12/2012 Current 109 16000 14/12/2010 Arya Current 110 Priya 130 16/11/2009 Saving Hina 204 30000 14/02/2014 saving 205 4000 8/9/2007 Kalpana Current

### To print all records containing letters in the range H to K

root@MUM084:~/Desktop# grep [H-K] bank.lst 101 **ADITYA** 0 14/11/2000 **CURRENT** 105 Jyotsna 5000 16/06/2012 saving Hina 204 30000 14/02/2014 saving 205 4000 8/9/2007 Kalpana Current

## To print lines begining with letter in the range H to K

root@MUM084:~/Desktop# grep ^[H-K] bank.lst Hina 204 30000 14/02/2014 saving Kalpana 205 4000 8/9/2007 Current

### To print lines which do not start with letters in range H to K

root@MUM084:~/Desktop# grep ^[^H-K] bank.lst 101 **ADITYA** 0 14/11/2000 **CURRENT** 102 Anil 10000 20/05/2011 saving 103 Naman<sub>0</sub> 20/08/2009 current 104 Ram 10000 15/08/2010 saving 105 5000 16/06/2012 Jvotsna saving 106 Mukesh 14000 20/12/2009 Current 107 Vishal 14500 30/11/2011 saving 108 15/12/2012 Current Chirag 0 Arya 16000 14/12/2010 109 Current Priya 130 110 16/11/2009 Saving 201 Bina 3000 11/03/2010 saving 202 Diya 4000 13/04/2018 Saving 203 Gargi 2000 21/01/2015 current

root@MUM084:~/Desktop#