GREP command in UNIX

root@MUM084:~# cd Desktop

root@MUM084:~/Desktop# ls
a.out   expressiontree.c~ linkedlistt.c~ s2179.c~
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   Naman 0   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   Arya   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   Naman 0   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   Chirag 0   15/12/2012   Current
                                        OR
root@MUM084:~/Desktop# grep Chirag bank.lst
108   Chirag 0   15/12/2012   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   current
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   Anil   10000 20/05/2011   saving
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   Arya   16000 14/12/2010   Current
110   Priya   130   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   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    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
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    Current
109    Arya   16000 14/12/2010    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    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    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
108    Chirag 0       15/12/2012    Current
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     Current
109     Arya   16000 14/12/2010     Current
110     Priya   130     16/11/2009     Saving
```

<div align="center">OR</div>

```
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     Current
109     Arya   16000 14/12/2010     Current
110     Priya   130     16/11/2009     Saving
```

Prints lines containing letter 'd'
```
root@MUM084:~/Desktop# grep "d" bank.lst
101     Aditya 0        14/11/2000     current
```

Prints lines containing letter 'D'
```
root@MUM084:~/Desktop# grep "D" bank.lst
```

Display all records that have or do not have letter 'D'
```
root@MUM084:~/Desktop# grep "D*" 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     Arya   16000 14/12/2010     Current
110     Priya   130     16/11/2009     Saving
```

Display all records that have or do not have letter 'b'
```
root@MUM084:~/Desktop# grep "b*" 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     Arya   16000 14/12/2010     Current
110     Priya   130     16/11/2009     Saving
```

Display all records starting with 1
```
root@MUM084:~/Desktop# grep "^1" 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     Arya   16000 14/12/2010     Current
110     Priya  130    16/11/2009     Saving
```

Display all records ending with 'nt'
```
root@MUM084:~/Desktop# grep "nt$" 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     Current
109     Arya   16000 14/12/2010     Current
```

 Display all records starting with 11
```
root@MUM084:~/Desktop# grep "^11" bank.lst
110     Priya  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
103     Naman0      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         Naman0      20/08/2009     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
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     Current
109     Arya   16000 14/12/2010     Current
```

```
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     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     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     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     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
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

root@MUM084:~/Desktop# cat >pattern.txt
current
Saving
^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 20/05/2011   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   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

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   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   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

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	Anil	10000	20/05/2011	saving
103	Naman	0	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	Arya	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.
root@MUM084:~/Desktop# grep [^2] bank.lst

101	Aditya	0	14/11/2000	current
102	Anil	10000	20/05/2011	saving
103	Naman	0	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	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
Kalpana		205	4000	8/9/2007	Current

To print lines which do not start with digit in range 2 to 3
root@MUM084:~/Desktop# grep ^[^2-3] bank.lst

101	ADITYA	0	14/11/2000	CURRENT
102	Anil	10000	20/05/2011	saving
103	Naman	0	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    Arya   16000 14/12/2010    Current
110    Priya  130      16/11/2009    Saving
Hina   204    30000 14/02/2014    saving
Kalpana       205    4000   8/9/2007        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
Kalpana       205    4000   8/9/2007        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    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    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
```

```
root@MUM084:~/Desktop#
```