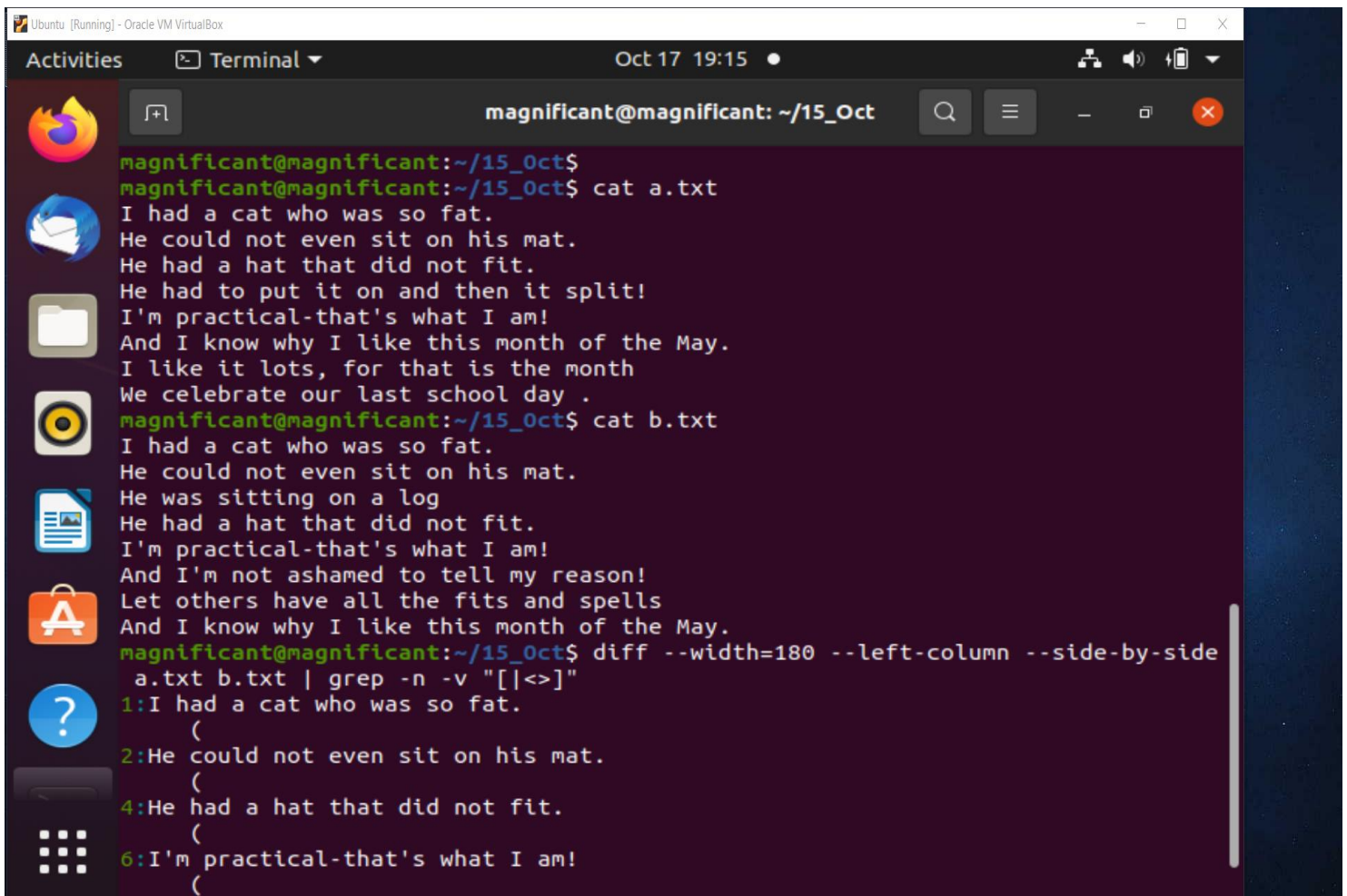


In this question , pipe method is used along with diff and grep to find the similarity between two files . First diff was used with its attributes , here width is set so that only the common lines are visible once. Side-by-side shows the both the in columns .Further this output which is right now the difference between the two files is piped to the grep method. In the grep method , -n shows the number of the line to be displayed and in the -v is used to invert the match . Now with the help of this , the lines that are same with be shown Also “[<>]” pattern is also not visible with the help of grep -v.



```
Ubuntu [Running] - Oracle VM VirtualBox
Activities Terminal Oct 17 19:15
magnificent@magnificent: ~/15_Oct
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$ cat a.txt
I had a cat who was so fat.
He could not even sit on his mat.
He had a hat that did not fit.
He had to put it on and then it split!
I'm practical-that's what I am!
And I know why I like this month of the May.
I like it lots, for that is the month
We celebrate our last school day .
magnificent@magnificent:~/15_Oct$ cat b.txt
I had a cat who was so fat.
He could not even sit on his mat.
He was sitting on a log
He had a hat that did not fit.
I'm practical-that's what I am!
And I'm not ashamed to tell my reason!
Let others have all the fits and spells
And I know why I like this month of the May.
magnificent@magnificent:~/15_Oct$ diff --width=180 --left-column --side-by-side
a.txt b.txt | grep -n -v "[<>]"
1:I had a cat who was so fat.
(
2:He could not even sit on his mat.
(
4:He had a hat that did not fit.
(
6:I'm practical-that's what I am!
(
```

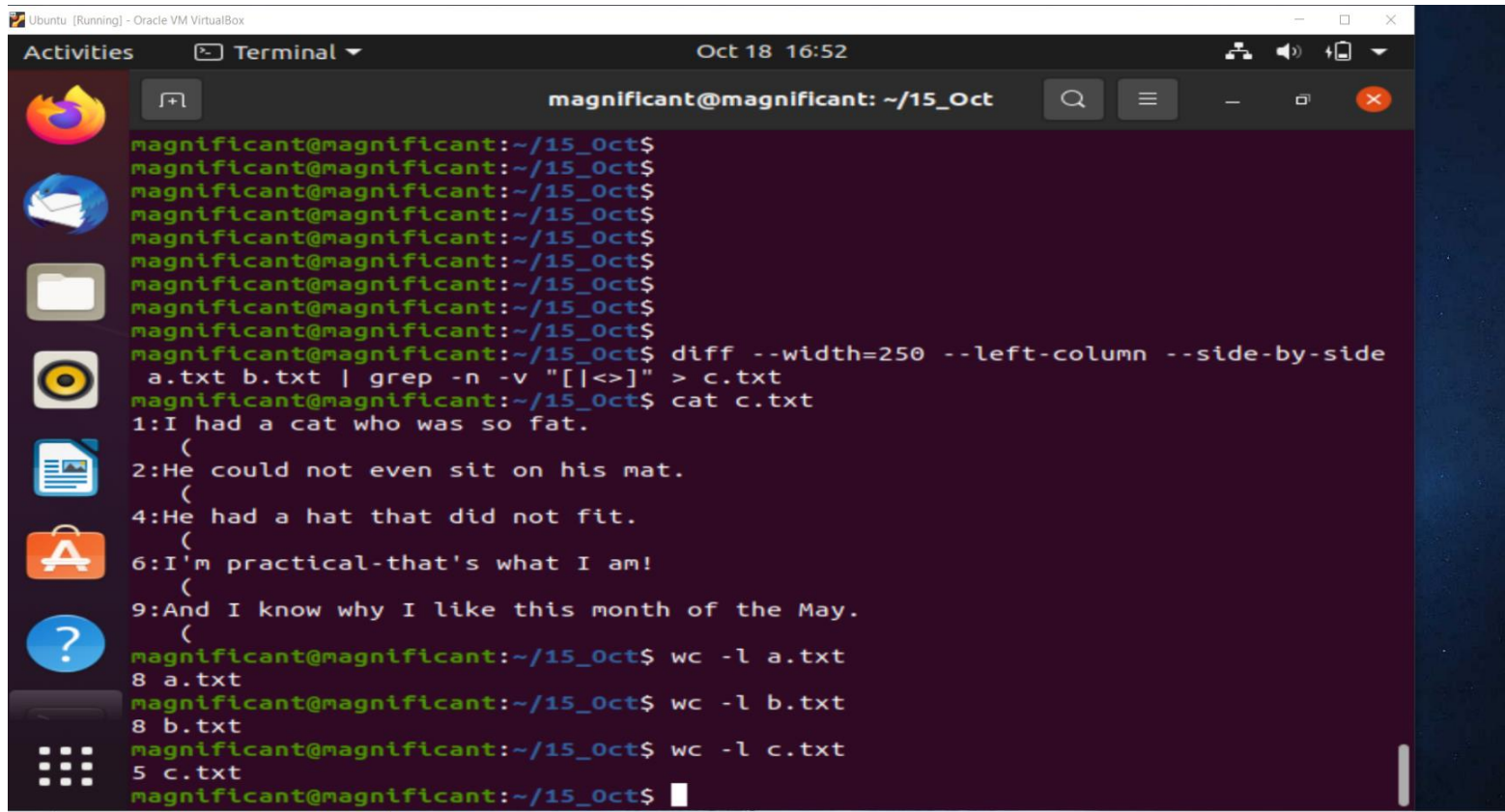
Ubuntu [Running] - Oracle VM VirtualBox

Activities Terminal Oct 17 19:16

magnificent@magnificent: ~/15_Oct

```
He could not even sit on his mat.
He had a hat that did not fit.
He had to put it on and then it split!
I'm practical-that's what I am!
And I know why I like this month of the May.
I like it lots, for that is the month
We celebrate our last school day .
magnificent@magnificent:~/15_Oct$ cat b.txt
I had a cat who was so fat.
He could not even sit on his mat.
He was sitting on a log
He had a hat that did not fit.
I'm practical-that's what I am!
And I'm not ashamed to tell my reason!
Let others have all the fits and spells
And I know why I like this month of the May.
magnificent@magnificent:~/15_Oct$ diff --width=180 --left-column --side-by-side
a.txt b.txt | grep -n -v "[|<>]"
1:I had a cat who was so fat.
(
2:He could not even sit on his mat.
(
4:He had a hat that did not fit.
(
6:I'm practical-that's what I am!
(
9:And I know why I like this month of the May.
(
magnificent@magnificent:~/15_Oct$
```

Now, we have stored the output generated into another file name c.txt. Then used wc -l to get the number of lines in the file a.txt.b.txt and c.txt respectively



```
Ubuntu [Running] - Oracle VM VirtualBox
Activities Terminal Oct 18 16:52
magnificent@magnificent: ~/15_Oct
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$
magnificent@magnificent:~/15_Oct$ diff --width=250 --left-column --side-by-side
a.txt b.txt | grep -n -v "[|<>]" > c.txt
magnificent@magnificent:~/15_Oct$ cat c.txt
1:I had a cat who was so fat.
(
2:He could not even sit on his mat.
(
4:He had a hat that did not fit.
(
6:I'm practical-that's what I am!
(
9:And I know why I like this month of the May.
(
magnificent@magnificent:~/15_Oct$ wc -l a.txt
8 a.txt
magnificent@magnificent:~/15_Oct$ wc -l b.txt
8 b.txt
magnificent@magnificent:~/15_Oct$ wc -l c.txt
5 c.txt
magnificent@magnificent:~/15_Oct$
```

Further created perl file called percentage.pl file and count the number of lines in the files compared both the original file and the file where we stored the output .

```
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$ cat percentage.pl  
$FILE="a.txt";  
open(FILE) or die "Cannot Open $FILE: $!";  
$count++ while<FILE>;  
print("Total no of line in the both files is :$count\n");  
$FILEC="c.txt";  
open(FILEC) or die "Cannot Open $FILEC: $!";  
$countc++ while<FILEC>;  
print("No of similar line found are :$countc\n");  
  
$a=$countc*100;  
$b=int($a/$count);  
print("Percentage of similarity is $b % \n");  
  
magnificent@magnificent:~/15_Oct$ perl percentage.pl  
Total no of line in the both files is :8  
No of similar line found are :5  
Percentage of similarity is 62 %  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$  
magnificent@magnificent:~/15_Oct$
```