

TEXT PROCESSING USING SHELLSCRIPT

Problem definition:

Text processing using shellscript, means using sed properties to process the data in horizontal manner.

About:

In this text processing we particularly used only sed command to process the data . We know that the awk command is most widely used in text processing very oftenly.

Recommended linux versions:

Mostly works in all the linux distributions., most preferably version 14 and more than that. I used linux 17.4(ubuntu).

Input:

Given text to process the data is

```
25 27 50
35 37 75
75 78 80
99 88 76
```

Steps to do :

- Open the ubuntu terminal.(press alt+ctrl+t to open the terminal).
- Move to your project folder., in my case it is "project" folder.
- Create a shellscript using any texteditors like gedit, vi , cat , etc., with the file extension ".sh" .
- and use the sed commands in it , like
sed 's/ /+/g' data | bc > data_total && head -1 data | sed 's/[^]//g' | wc -c > data_avg
which is used to add the data horizontally , and also to find the avg to the given data .

- Read the input text file data in to "n" variable.
n=\$(cat data_total)
- Read the avg file processed data into "q" variable.
q=\$(cat data_avg)
- For loop to read every line in data_total file and sends to data_percentage file.....
for i in `cat data_total`
do
echo "`expr \$i / \$q`%"
done > data_percentage
- To allocate grades to file called data_percentage and store it in output.....
awk '{if(\$1 >= 90)print \$0" A Grade"; else if(\$1 >= 70)print \$0", B Grade"; else if(\$1 <= 69)print \$0", C Grade"; else print\$0", D Grade" }' data_percentage > output
- To print the output.....
paste -d '-' data output
- save the script.sh file
- run the shellscript file in bash using the following command
" \$ sh script.sh"

Output:

```

1 #!/bin/sh
2
3 # Read the input text file data in to "n" variable.
4 n=$( cat data_total )
5
6 # Read the avg file processed data into "q" variable.
7 q=$( cat data_avg )
8
9 # For loop to read every line in data_total file and sends to data_percentage file.....
10 for i in `cat data_total`
11 do
12 echo "`expr $i / $q`%"
13 done > data_percentage
14
15 # To allocate grades to file called data_percentage and store it in output.....
16 awk '{if($1 >= 90)print $0" A Grade"; else if($1 >= 70)print $0", B Grade"; else if($1 <= 69)print $0", C Grade"; else print$0", D Grade" }' data_percentage > output
17
18 # To print the output.....
19 paste -d '-' data output
20
21 # save the script.sh file
22
23 # run the shellscript file in bash using the following command
24 " $ sh script.sh"

```

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