Practical No - 4 (sed editor)

Create the file with the name "sed-test" with the following contents: -
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

Write and execute the commands for the following using sed:
1. Display only first three lines.
Code: [tybscit@localhost Desktop]$ sed '3q' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y

2. Display line numbers from four to seven.
Code: [tybscit@localhost Desktop]$ sed -n '4,7p' sed-test
Output:
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n

3. Display only last line.
Code: [tybscit@localhost Desktop]$ sed -n '$p' sed-test
Output: Celery:Veg:1.79:1:n

4. Display only line number 8.
Code: [tybscit@localhost Desktop]$ sed -n '8p' sed-test
Output: Newspaper:Sundry:1.00:1:y

5. Display lines containing "Onions".
Code: [tybscit@localhost Desktop]$ sed -n '/Onions/p' sed-test
Output: Onions:Veg:0.89:6:n

6. Display all lines containing "Diary".
Code: [tybscit@localhost Desktop]$ sed -n '/Diary/p' sed-test
Output:
Milk:Diary:1.89:2:n
Cheese:Diary:4.39:1:n

7. Delete second line.
Code: [tybscit@localhost Desktop]$ sed '2d' sed-test
Output:
Carrots:veg:1.39:1:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

8. Delete lines from seven to ten.
Code: [tybscit@localhost Desktop]$ sed '7,10d' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

9. Delete lines containing "Meat".
Code: [tybscit@localhost Desktop]$ sed -n '/Meat/d' sed-test

10. Display lines start at 3 through the first line matching the string "Meat".
Code: [tybscit@localhost Desktop]$ sed -n '3,/Meat/p' sed-test
Output:
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n

11. Delete lines start at 4 through the first line matching the string "Fruit".
Code: [tybscit@localhost Desktop]$ sed -n '4,/Fruit/d' sed-test

12. Display lines number at interval of 2 i.e. starting at 1, every other line is output.
Code: [tybscit@localhost Desktop]$ cat -n sed-test|sed -n '1~2p'
Output:
1 Carrots:veg:1.39:1:n
3 Magazine:Sundry:3.50:1:y
5 Sandwich:Deli:3.89:2:y
7 Chicken:Meat:4.89:2:n
9 Fish:Meat:3.79:3:n
11 Floorwax:Hshld:4.65:1:y
13
15

13. Display lines starting at 2 and outputs every third line from there.
Code: [tybscit@localhost Desktop]$ cat -n sed-test|sed -n '2~3p'
Output:
2 Milk:Diary:1.89:2:n
5 Sandwich:Deli:3.89:2:y
8 Newspaper:Sundry:1.00:1:y
11 Floorwax:Hshld:4.65:1:y
14 Celery:Veg:1.79:1:n

14. Display lines starting with "S".
Code: [tybscit@localhost Desktop]$ sed -n '/^S/p' sed-test
Output: Sandwich:Deli:3.89:2:y

15. Display lines ends with "n".

Code: [tybscit@localhost Desktop]$ sed -n '/n$/p' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Cheese:Diary:4.39:1:n
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Fish:Meat:3.79:3:n
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

16. Display lines that are not starting with "C".
Code: [tybscit@localhost Desktop]$ sed -n '/^C/!p' sed-test
Output:
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n

17. Display lines that are not ending with "y".
Code: [tybscit@localhost Desktop]$ sed -n '/[^y]$/p' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Cheese:Diary:4.39:1:n
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Fish:Meat:3.79:3:n
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

18. Display all lines that are not starting with "v" or "V" in second field.
Code: [tybscit@localhost Desktop]$ cut -d ":" -f2 sed-test|sed -n '/^[vV]/!p'
Output:
Diary
Sundry

Diary
Deli
Meat
Sundry
Meat
Hshld
Fruit

19. Display all lines that are not ending with "y" in second field.
Code: [tybscit@localhost Desktop]$ cut -d ":" -f2 sed-test|sed -n '/y$/!p' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Cheese:Diary:4.39:1:n
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Fish:Meat:3.79:3:n
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

20. Delete lines containing nothing.
Code: [tybscit@localhost Desktop]$ sed -n '/^$/d' sed-test

21. Delete all lines containing "2" in third field.
Code: [tybscit@localhost Desktop]$ cut -d f4 sed-test|sed '/2/d' sed-test
Output:
Carrots:veg:1.39:1:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Onions:Veg:0.89:6:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n
22. Delete all lines containing "y" in fourth field.
Code: [tybscit@localhost Desktop]$ cut -d f5 sed-test|sed '/y/d' sed-test
Output:
Carrots:veg:1.39:1:n

Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Fish:Meat:3.79:3:n
Melon:Fruit:1.98:3:n

23. Display all lines that do not start with C.
Code: [tybscit@localhost Desktop]$ sed -n '/^S/!p' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

24. Display all lines that are not empty.
Code: [tybscit@localhost Desktop]$ sed -n '/^$/!p' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

25. Delete any other line that does not contain the string "Fish".
Code: [tybscit@localhost Desktop]$ sed -n '/Fish/!d' sed-test

26. Display lines between the strings "Milk" and "Newspaper".

Code: [tybscit@localhost Desktop]$ sed -n '/Milk/,/Newspaper/p' sed-test
Output:
Milk:Diary:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y

27. Display lines between the string "Sundry" and line number 11.
Code: [tybscit@localhost Desktop]$ sed -n '/Sundry/,11p' sed-test
Output:
Magazine:Sundry:3.50:1:y
Cheese:Diary:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y

28. Replace only first occurrence of "Diary" with "DAIRY" in all lines.
Code: [tybscit@localhost Desktop]$ sed 's/Diary/DAIRY/' sed-test
Output:
Carrots:veg:1.39:1:n
Milk:DAIRY:1.89:2:n
Magazine:Sundry:3.50:1:y
Cheese:DAIRY:4.39:1:n
Sandwich:Deli:3.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:3.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:3:n
Celery:Veg:1.79:1:n

29. Replace only first occurrence of "Diary" with "DAIRY" in all lines.
Code: [tybscit@localhost Desktop]$ sed 's/3/4/' sed-test

Output:
Carrots:veg:1.49:1:n
Milk:Diary:1.89:2:n
Magazine:Sundry:4.50:1:y
Cheese:Diary:4.49:1:n
Sandwich:Deli:4.89:2:y
Onions:Veg:0.89:6:n
Chicken:Meat:4.89:2:n
Newspaper:Sundry:1.00:1:y
Fish:Meat:4.79:3:n
Floorwax:Hshld:4.65:1:y
Melon:Fruit:1.98:4:n
Celery:Veg:1.79:1:n