```
> library(tidyverse)
-- Attaching packages ------ tidyverse 1.3.0 --
v ggplot2 3.3.2 v purrr 0.3.4
v tibble 3.0.3 v dplyr 1.0.2
v tidyr 1.1.2 v stringr 1.4.0
v readr 1.3.1 v forcats 0.5.0
-- Conflicts ----- tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag() masks stats::lag()
> library(ggplot2)
> library(tibble)
> getwd()
[1] "C:/Users/Admin/Documents"
> #setwd("C:\\Users\\Admin\\Desktop\\sample")
> setwd("C:\\Users\\Admin\\Desktop\\sample")
> getwd()
[1] "C:/Users/Admin/Desktop/sample"
> Sample=read.csv("SampleSuperstore.csv")
> Sample
    Ship.Mode Segment
                           Country
                                        City
                                                 State
1 Second Class Consumer United States
                                         Henderson
                                                       Kentucky
2 Second Class Consumer United States
                                         Henderson
                                                       Kentucky
3 Second Class Corporate United States Los Angeles California
4 Standard Class Consumer United States Fort Lauderdale
                                                         Florida
5 Standard Class Consumer United States Fort Lauderdale
                                                         Florida
6 Standard Class Consumer United States Los Angeles California
7 Standard Class Consumer United States Los Angeles
                                                      California
8 Standard Class Consumer United States Los Angeles
                                                      California
```

9 Standard Class Consumer United States Los Angeles California

10 9	Standard Class	Consumer United States	Los Angeles	California
11 9	Standard Class	Consumer United States	Los Angeles	California
12 9	Standard Class	Consumer United States	Los Angeles	California
13 9	Standard Class	Consumer United States	Concord N	Iorth Carolina
14 9	Standard Class	Consumer United States	Seattle	Washington
15 9	Standard Class	Home Office United States	Fort Worth	Texas
16 9	Standard Class	Home Office United States	Fort Worth	Texas
17 9	Standard Class	Consumer United States	Madison	Wisconsin
18	Second Class	Consumer United States	West Jordan	Utah
19	Second Class	Consumer United States	San Francisco	California
20	Second Class	Consumer United States	San Francisco	California
21	Second Class	Consumer United States	San Francisco	California
22 9	Standard Class	Corporate United States	Fremont	Nebraska
23 9	Standard Class	Corporate United States	Fremont	Nebraska
24	Second Class	Consumer United States	Philadelphia	Pennsylvania
25 9	Standard Class	Consumer United States	Orem	Utah
26	Second Class	Consumer United States	Los Angeles	California
27	Second Class	Consumer United States	Los Angeles	California
28 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
29 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
30 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
31 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
32 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
33 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
34 9	Standard Class	Consumer United States	Philadelphia	Pennsylvania
35	Second Class H	Iome Office United States	Houston	Texas
36	First Class Co	orporate United States R	Richardson	Texas
37	First Class Co	orporate United States R	Richardson	Texas
38 9	Standard Class	Home Office United States	Houston	Texas
39 9	Standard Class	Home Office United States	Houston	Texas
40 9	Standard Class	Home Office United States	Houston	Texas

41 Standard Class Home Office United States Houston Texas						
42 Standard Class Corporate United States Naperville Illinois						
43 Standard Class Corporate United States Los Angeles California						
44 Standard Class Corporate United States	Melbourne Florida					
45 First Class Corporate United States	Eagan Minnesota					
46 First Class Corporate United States	Eagan Minnesota					
47 Second Class Consumer United States	Westland Michigan					
48 Standard Class Consumer United States	Dover Delaware					
49 Standard Class Consumer United States Dover Delaware						
50 Standard Class Consumer United States New Albany Indiana						
51 Standard Class Consumer United States	New Albany Indiana					
52 Standard Class Consumer United States New Albany Indiana						
53 Standard Class Consumer United States New Albany Indiana						
54 Standard Class Corporate United States	New York City New York					
55 Standard Class Corporate United States	New York City New York					
56 First Class Consumer United States	Troy New York					
57 First Class Consumer United States	Troy New York					
58 First Class Consumer United States	Troy New York					
59 First Class Consumer United States	Troy New York					
60 First Class Consumer United States	Troy New York					
61 First Class Consumer United States	Troy New York					
62 First Class Consumer United States	Troy New York					
63 Standard Class Consumer United States	Los Angeles California					
64 Standard Class Consumer United States	Los Angeles California					
65 Standard Class Consumer United States	Los Angeles California					
66 Standard Class Consumer United States Los Angeles California						
67 Standard Class Home Office United States Chicago Illinois						
68 Standard Class Corporate United States Gilbert Arizona						
69 Standard Class Corporate United States Gilbert Arizona						
70 First Class Consumer United States Springfield Virginia						
71 Standard Class Consumer United States	New York City New York					

- 72 Second Class Consumer United States Jackson Michigan
- 73 Standard Class Consumer United States Memphis Tennessee
- 74 Standard Class Consumer United States Memphis Tennessee
- 75 Standard Class Consumer United States Memphis Tennessee
- 76 First Class Corporate United States Houston Texas
- Postal.Code Region Category Sub.Category Sales Quantity Discount
- 1 42420 South Furniture Bookcases 261.9600 2 0.00
- 2 42420 South Furniture Chairs 731.9400 3 0.00
- 3 90036 West Office Supplies Labels 14.6200 2 0.00
- 4 33311 South Furniture Tables 957.5775 5 0.45
- 5 33311 South Office Supplies Storage 22.3680 2 0.20
- 6 90032 West Furniture Furnishings 48.8600 7 0.00
- 7 90032 West Office Supplies Art 7.2800 4 0.00
- 8 90032 West Technology Phones 907.1520 6 0.20
- 9 90032 West Office Supplies Binders 18.5040 3 0.20
- 10 90032 West Office Supplies Appliances 114.9000 5 0.00
- 11 90032 West Furniture Tables 1706.1840 9 0.20
- 12 90032 West Technology Phones 911.4240 4 0.20
- 13 28027 South Office Supplies Paper 15.5520 3 0.20
- 14 98103 West Office Supplies Binders 407.9760 3 0.20
- 15 76106 Central Office Supplies Appliances 68.8100 5 0.80
- 16 76106 Central Office Supplies Binders 2.5440 3 0.80
- 17 53711 Central Office Supplies Storage 665.8800 6 0.00
- 18 84084 West Office Supplies Storage 55.5000 2 0.00
- 19 94109 West Office Supplies Art 8.5600 2 0.00
- 20 94109 West Technology Phones 213.4800 3 0.20
- 21 94109 West Office Supplies Binders 22.7200 4 0.20
- 22 68025 Central Office Supplies Art 19.4600 7 0.00
- 23 68025 Central Office Supplies Appliances 60.3400 7 0.00
- 24 19140 East Furniture Chairs 71.3720 2 0.30
- 25 84057 West Furniture Tables 1044.6300 3 0.00

- 26 90049 West Office Supplies Binders 11.6480 2 0.20
- 27 90049 West Technology Accessories 90.5700 3 0.00
- 28 19140 East Furniture Bookcases 3083.4300 7 0.50
- 29 19140 East Office Supplies Binders 9.6180 2 0.70
- 30 19140 East Furniture Furnishings 124.2000 3 0.20
- 31 19140 East Office Supplies Envelopes 3.2640 2 0.20
- 32 19140 East Office Supplies Art 86.3040 6 0.20
- 33 19140 East Office Supplies Binders 6.8580 6 0.70
- 34 19140 East Office Supplies Art 15.7600 2 0.20
- 35 77095 Central Office Supplies Paper 29.4720 3 0.20
- 36 75080 Central Technology Phones 1097.5440 7 0.20
- 37 75080 Central Furniture Furnishings 190.9200 5 0.60
- 38 77041 Central Office Supplies Envelopes 113.3280 9 0.20
- 39 77041 Central Furniture Bookcases 532.3992 3 0.32
- 40 77041 Central Furniture Chairs 212.0580 3 0.30
- 41 77041 Central Technology Phones 371.1680 4 0.20
- 42 60540 Central Technology Phones 147.1680 4 0.20
- 43 90049 West Office Supplies Storage 77.8800 2 0.00
- 44 32935 South Office Supplies Storage 95.6160 2 0.20
- 45 55122 Central Technology Accessories 45.9800 2 0.00
- 46 55122 Central Office Supplies Binders 17.4600 2 0.00
- 47 48185 Central Office Supplies Storage 211.9600 4 0.00
- 48 19901 East Technology Accessories 45.0000 3 0.00
- 49 19901 East Technology Phones 21.8000 2 0.00
- 50 47150 Central Office Supplies Binders 38.2200 6 0.00
- 51 47150 Central Office Supplies Labels 75.1800 6 0.00
- 52 47150 Central Furniture Furnishings 6.1600 2 0.00
- 53 47150 Central Furniture Chairs 89.9900 1 0.00
- 54 10024 East Office Supplies Fasteners 15.2600 7 0.00
- 55 10024 East Technology Phones 1029.9500 5 0.00
- 56 12180 East Office Supplies Storage 208.5600 6 0.00

- 57 12180 East Office Supplies Paper 32.4000 5 0.00
- 58 12180 East Furniture Chairs 319.4100 5 0.10
- 59 12180 East Office Supplies Paper 14.5600 2 0.00
- 60 12180 East Technology Accessories 30.0000 2 0.00
- 61 12180 East Office Supplies Binders 48.4800 4 0.20
- 62 12180 East Office Supplies Art 1.6800 1 0.00
- 63 90004 West Technology Accessories 13.9800 2 0.00
- 64 90004 West Office Supplies Binders 25.8240 6 0.20
- 65 90004 West Office Supplies Paper 146.7300 3 0.00
- 66 90004 West Furniture Furnishings 79.7600 4 0.00
- 67 60610 Central Furniture Chairs 213.1150 5 0.30
- 68 85234 West Office Supplies Art 1113.0240 8 0.20
- 69 85234 West Technology Phones 167.9680 4 0.20
- 70 22153 South Office Supplies Paper 75.8800 2 0.00
- 71 10009 East Office Supplies Binders 4.6160 1 0.20
- 72 49201 Central Office Supplies Paper 19.0500 3 0.00
- 73 38109 South Furniture Chairs 831.9360 8 0.20
- 74 38109 South Furniture Furnishings 97.0400 2 0.20
- 75 38109 South Office Supplies Storage 72.7840 1 0.20
- 76 77041 Central Office Supplies Binders 1.2480 3 0.80

Profit

- 1 41.9136
- 2 219.5820
- 3 6.8714
- 4 -383.0310
- 5 2.5164
- 6 14.1694
- 7 1.9656
- 8 90.7152
- 9 5.7825
- 10 34.4700

- 11 85.3092
- 12 68.3568
- 13 5.4432
- 14 132.5922
- 15 -123.8580
- 16 -3.8160
- 17 13.3176
- 18 9.9900
- 19 2.4824
- 20 16.0110
- 21 7.3840
- 22 5.0596
- 23 15.6884
- 24 -1.0196
- 25 240.2649
- 26 4.2224
- 27 11.7741
- 28 -1665.0522
- 29 -7.0532
- 30 15.5250
- 31 1.1016
- 32 9.7092
- 33 -5.7150
- 34 3.5460
- 35 9.9468
- 36 123.4737
- 37 -147.9630
- 38 35.4150
- 39 -46.9764
- 40 -15.1470
- 41 41.7564

- 42 16.5564
- 43 3.8940
- 44 9.5616
- 45 19.7714
- 46 8.2062
- 47 8.4784
- 48 4.9500
- 49 6.1040
- 50 17.9634
- 51 35.3346
- 52 2.9568
- 53 17.0981
- 54 6.2566
- 55 298.6855
- 56 52.1400
- 57 15.5520
- 58 7.0980
- 59 6.9888
- 60 3.3000
- 61 16.3620
- 62 0.8400
- 63 6.1512
- 64 9.3612
- 65 68.9631
- 66 22.3328
- 67 -15.2225
- 68 111.3024
- 69 62.9880
- 70 35.6636
- 71 1.7310
- 72 8.7630

```
73 -114.3912
74 1.2130
75 -18.1960
76 -1.9344
[ reached 'max' / getOption("max.print") -- omitted 9918 rows ]
> Sample<-as.tibble(Sample)
Warning message:
`as.tibble()` is deprecated as of tibble 2.0.0.
Please use `as_tibble()` instead.
The signature and semantics have changed, see `?as_tibble`.
This warning is displayed once every 8 hours.
Call `lifecycle::last_warnings()` to see where this warning was generated.
> Sample
# A tibble: 9,994 x 13
 Ship. Mode Segment Country City State Postal. Code Region Category Sub. Category
 <chr> <chr> <chr> <chr> <chr>
                                     <int> <chr> <chr> <chr>
1 Second C~ Consum~ United~ Hend~ Kent~
                                             42420 South Furnitu~ Bookcases
2 Second C~ Consum~ United~ Hend~ Kent~
                                             42420 South Furnitu~ Chairs
3 Second C~ Corpor~ United~ Los ~ Cali~ 90036 West Office ~ Labels
4 Standard~ Consum~ United~ Fort~ Flor~
                                         33311 South Furnitu~ Tables
5 Standard~ Consum~ United~ Fort~ Flor~ 33311 South Office ~ Storage
6 Standard~ Consum~ United~ Los ~ Cali~
                                          90032 West Furnitu~ Furnishings
7 Standard~ Consum~ United~ Los ~ Cali~
                                           90032 West Office ~ Art
8 Standard~ Consum~ United~ Los ~ Cali~
                                           90032 West Technol~ Phones
9 Standard~ Consum~ United~ Los ~ Cali~
                                           90032 West Office ~ Binders
10 Standard~ Consum~ United~ Los ~ Cali~
                                           90032 West Office ~ Appliances
# ... with 9,984 more rows, and 4 more variables: Sales <dbl>, Quantity <int>,
# Discount <dbl>, Profit <dbl>
> df=Sample
> df
# A tibble: 9,994 x 13
```

Ship. Mode Segment Country City State Postal. Code Region Category Sub. Category

<chr> <chr

1 Second C~ Consum~ United~ Hend~ Kent~ 42420 South Furnitu~ Bookcases

2 Second C~ Consum~ United~ Hend~ Kent~ 42420 South Furnitu~ Chairs

3 Second C~ Corpor~ United~ Los ~ Cali~ 90036 West Office ~ Labels

4 Standard Consum United Fort Flor 33311 South Furnitu Tables

5 Standard~ Consum~ United~ Fort~ Flor~ 33311 South Office ~ Storage

6 Standard~ Consum~ United~ Los ~ Cali~ 90032 West Furnitu~ Furnishings

7 Standard~ Consum~ United~ Los ~ Cali~ 90032 West Office ~ Art

8 Standard~ Consum~ United~ Los ~ Cali~ 90032 West Technol~ Phones

9 Standard~ Consum~ United~ Los ~ Cali~ 90032 West Office ~ Binders

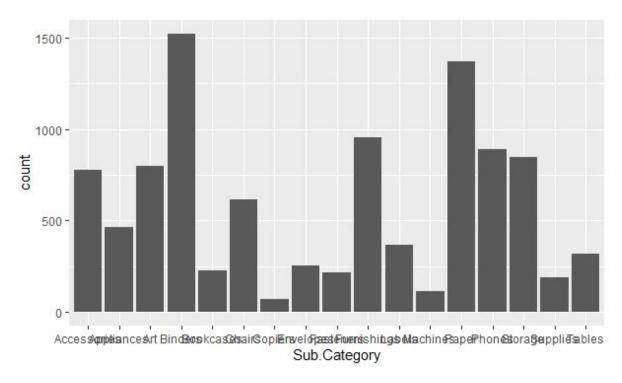
10 Standard~ Consum~ United~ Los ~ Cali~ 90032 West Office ~ Appliances

... with 9,984 more rows, and 4 more variables: Sales <dbl>, Quantity <int>,

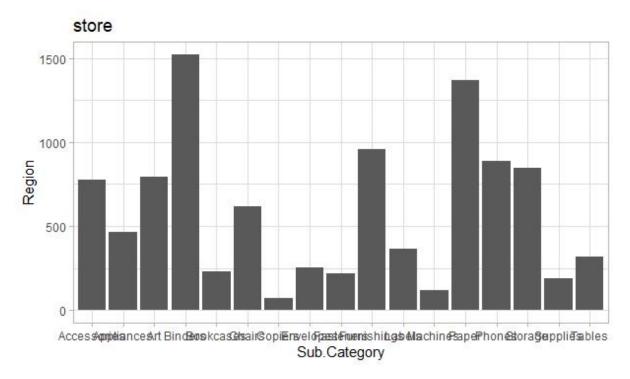
Discount <dbl>, Profit <dbl>

> bar<-ggplot(df,aes(x=Sub.Category))

> bar+geom_bar()

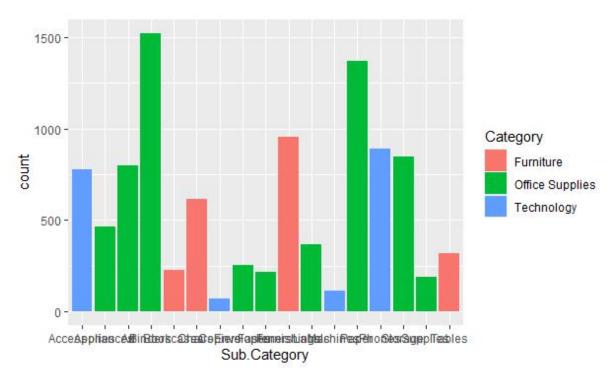


- > bar+geom_bar()+theme_light()+
- + labs(y="Region",title="store")



> bar<-ggplot(df,aes(x=Sub.Category,fill=Category))

> bar+geom_bar()



> bar+geom_bar()+theme_light()+

+ labs(y="Region",x="Sub.Category",title="store")

