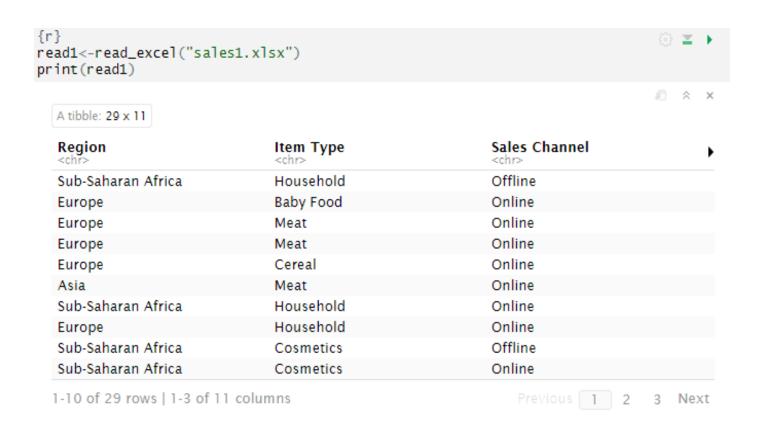
## This is the data file opened in the RStudio program that I will use for this exercise.



{r} read1<-read\_excel("sales1.xlsx")</pre> print(read1) A tibble: 29 x 11 Unit Cost 🗼 Order Date Order ID Units Sold Unit Price <S3: POSIXct> <dbl> <dbl> <dbl> 2015-08-31 897751939 3604 668.27 502.54 2010-11-20 599480426 8435 255.28 159.42 2017-06-22 538911855 4848 421.89 364.69

7225

1975

2542

4398

4031

7911

49

421.89

205.70

421.89

668.27

668.27

437.20

437.20

2012-02-28

2010-08-12

2010-08-20

2011-02-03

2015-09-11

2014-01-31

2015-11-21

459845054

626391351

472974574

854331052

895509612

241871583

409090793

{r} read1<-read\_excel("sales1.xlsx")</pre> print(read1)

A X

364.69

117.11

364.69

502.54

502.54

263.33

263.33

Next

A tibble: 29 x 11

**Unit Price Unit Cost** Total Revenue Total Cost **Total Profit** <dbl> <dbl> <dbl> <dbl> <dbl> 668.27 502.54 2408445.08 1811154.16 597290.92 255.28 2153286.80 1344707.70 808579.10 159.42 421.89 364.69 2045322.72 1768017.12 277305.60 3048155.25 421.89 364.69 2634885.25 413270.00 205.70 406257.50 231292.25 117.11 174965.25 421.89 364.69 1072444.38 927041.98 145402.40 668.27 502.54 2939051.46 2210170.92 728880.54 32745.23 24624.46 8120.77 668.27 502.54 437.20 263.33 1762353.20 1061483.23 700869.97 437.20 263.33 3458689.20 2083203.63 1375485.57

1-10 of 29 rows | 4-8 of 11 columns

1-10 of 29 rows | 7-11 of 11 columns

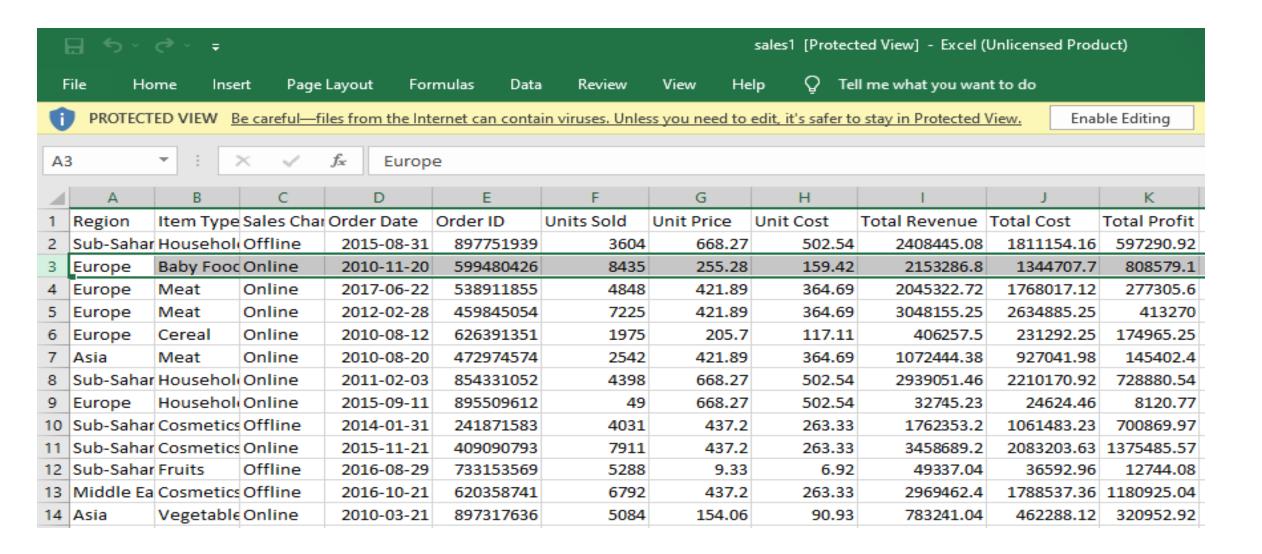


```
{r}
dim(read1)

[1] 29 11
```

```
{r}
                                                                       # =
str(read1)
                                                                      Classes 'tbl_df', 'tbl' and 'data.frame': 29 obs. of 11 variables:
 $ Region : chr "Sub-Saharan Africa" "Europe" "Europe" "Europe" ...
 $ Item Type : chr "Household" "Baby Food" "Meat" "Meat" ...
 $ Sales Channel: chr "Offline" "Online" "Online" "Online" ...
 $ Order Date : POSIXct, format: "2015-08-31" "2010-11-20" ...
 $ order ID : num 8.98e+08 5.99e+08 5.39e+08 4.60e+08 6.26e+08 ...
 $ Units Sold : num 3604 8435 4848 7225 1975 ...
 $ Unit Price : num 668 255 422 422 206 ...
 $ Unit Cost : num 503 159 365 365 117 ...
 $ Total Revenue: num 2408445 2153287 2045323 3048155 406258 ...
 $ Total Cost : num 1811154 1344708 1768017 2634885 231292 ...
 $ Total Profit : num 597291 808579 277306 413270 174965 ...
NULL
```

## For example we choose from this table N3 "Europe"



Sales Growth Rate = ((Current Period Sales - Prior Period Sales) / Prior Period Sales) \* 100% Sales Growth Rare=((2153286.8-1344707.7)/1344707.7)\*100% = 60.13%

| 1 | Region   | Item Type Sales Char | Order Date | Order ID  | Units Sold | Unit Price | Unit Cost | Total Revenue | Total Cost | Total Profit |
|---|----------|----------------------|------------|-----------|------------|------------|-----------|---------------|------------|--------------|
| 2 | Sub-Saha | r Househol Offline   | 2015-08-31 | 897751939 | 3604       | 668.27     | 502.54    | 2408445.08    | 1811154.16 | 597290.92    |
| 3 | Europe   | Baby Food Online     | 2010-11-20 | 599480426 | 8435       | 255.28     | 159.42    | 2153286.8     | 1344707.7  | 808579.1     |