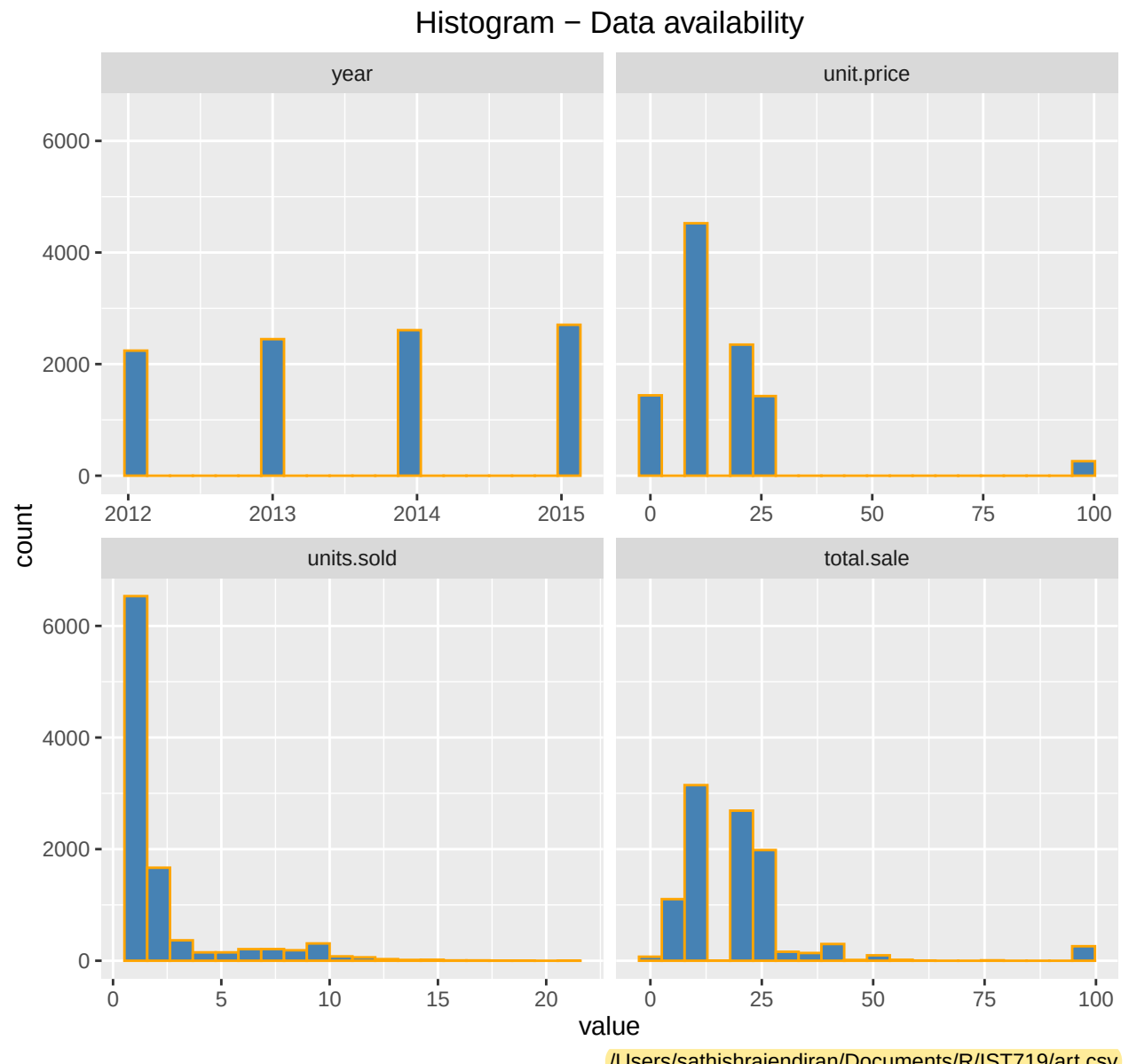
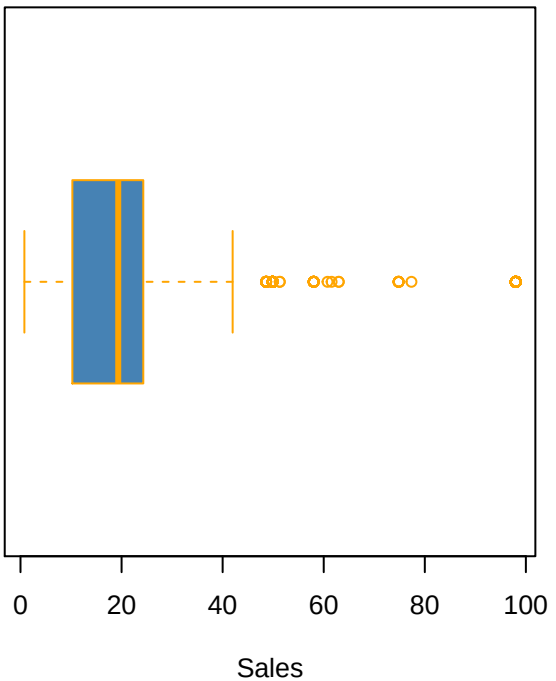
```
> #structure of the data set
> str(art)
'data.frame':   10000 obs. of  9 variables:
 $ date      : chr  "1/3/2012" "1/3/2012" "1/3/2012" "1/4/2012" ...
 $ year      : int  2012 2012 2012 2012 2012 2012 2012 2012 2012 2012 ...
 $ rep       : chr  "Qiaoli" "Qiaoli" "Barakat" "Thomas" ...
 $ store     : chr  "Portland" "Portland" "Portland" "Davenport" ...
 $ paper     : chr  "watercolor" "drawing" "drawing" "watercolor" ...
 $ paper.type: chr  "pad" "roll" "pads" "pad" ...
 $ unit.price: num  12.2 21 10.3 12.2 10.3 ...
 $ units.sold: int  1 1 1 2 1 1 16 2 1 1 ...
 $ total.sale: num  12.2 21 10.3 24.3 10.3 ...
> ################################################
> # Desription: Art Dataset
> # - This dataset includes stationary (paper) sales across 4 stores between 2012 and 2015.
> # - There are about 10,000 observations across 9 variables
> #   "date", "year", "rep", "store","paper", "paper.type", "unit.price", "units.sold" and "total.sale"
> # - Total sales of 4 types of paper include, "pad", "roll", "pads", "journal","sheet", "block"
> # - Two major kinds of paper are watercolor and drawing by 12 reps across all stores
>
> ################################################
> #
> cat("Number of Columns ",ncols)
Number of Columns  9
> cat("Number of Rows ",nrows)
Number of Rows  10000
> cat("data size is ",data.size) #3600
data size is  3600
```

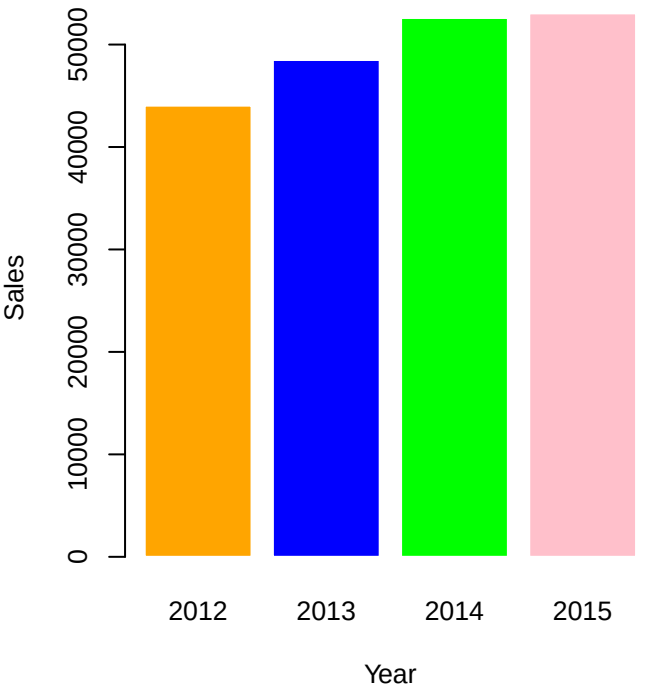

Histogram − Data availability
year
unit.price
units.sold
total.sale
count
value
6000
4000
2000
0
2012
2013
2014
2015
0
25
50
75
100
5
10
15
20
/Users/sathishrajendiran/Documents/R/IST719/art.csv

Single Dimension Charts

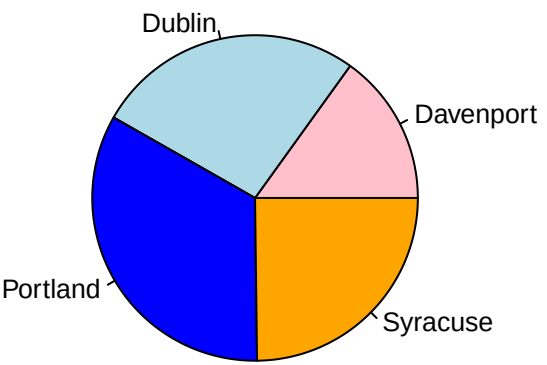
Total Sales distribution



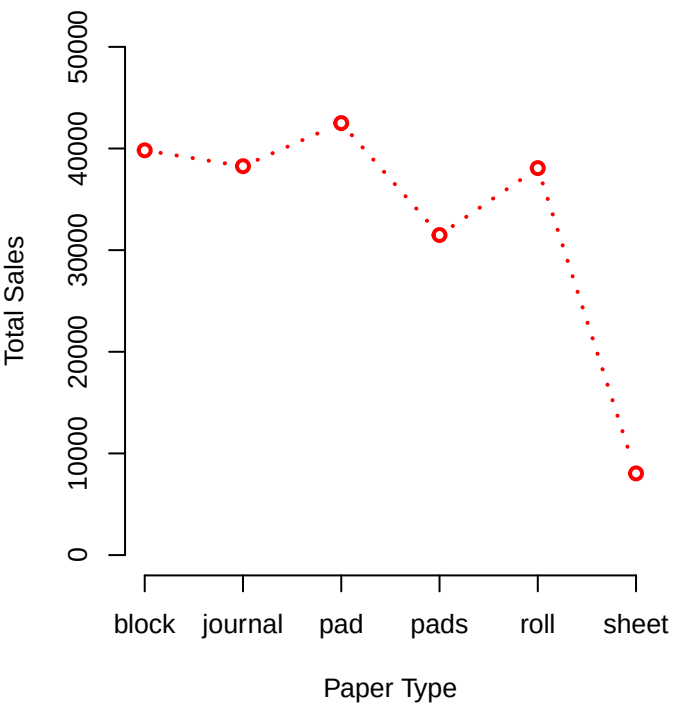
Total Sales by Year



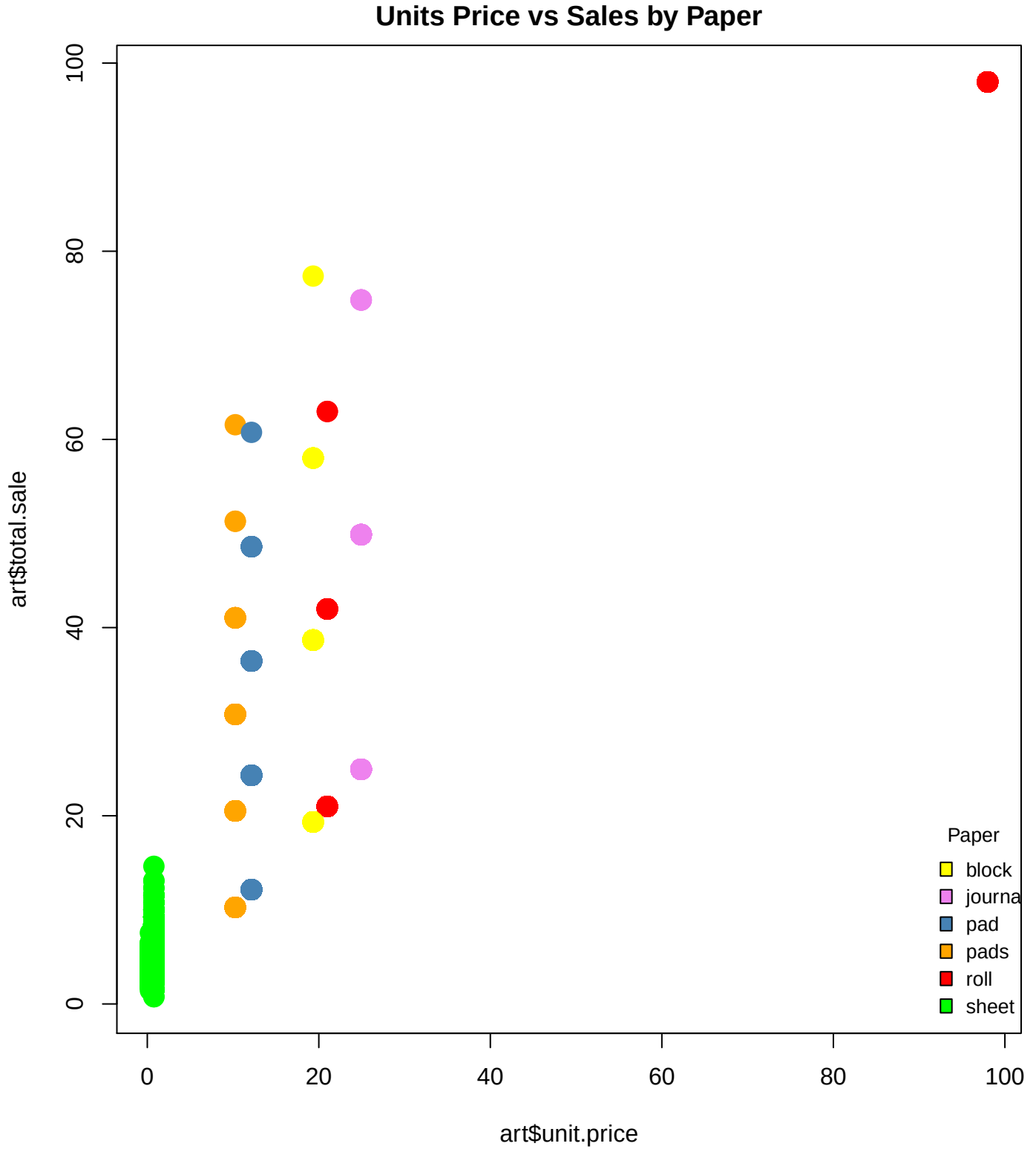
Units Sold by Store

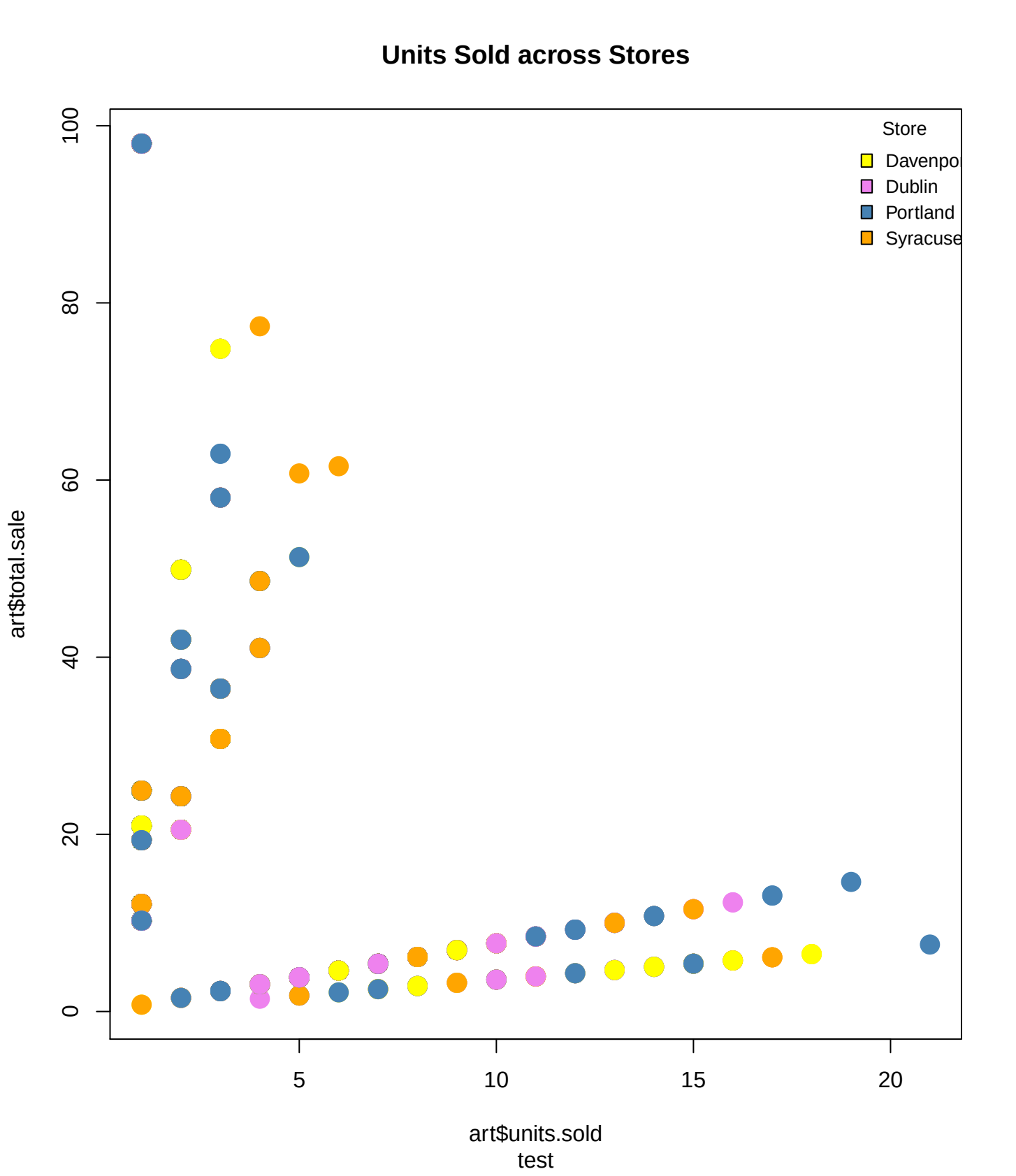


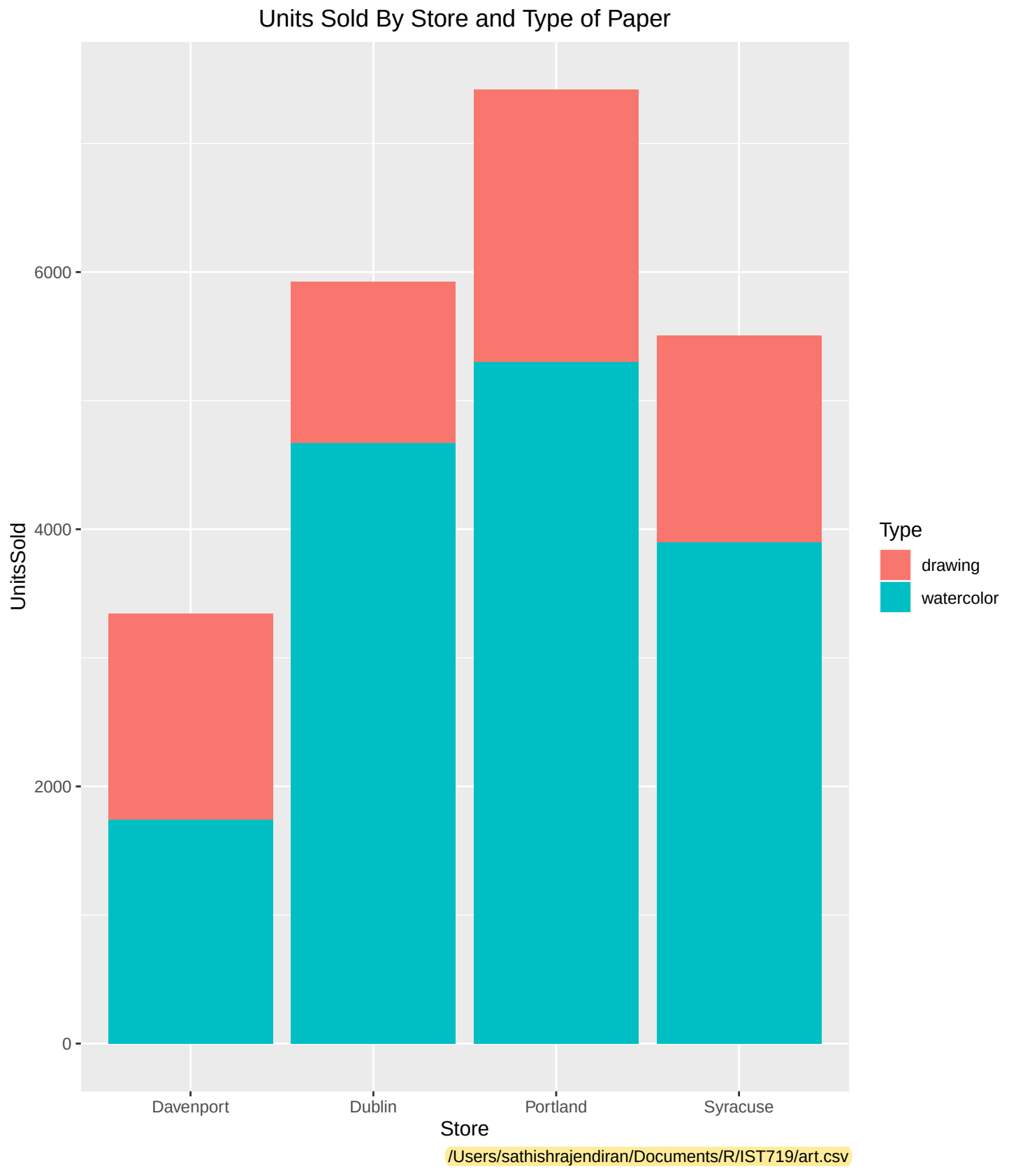
Total Sales by Paper Type



Multi Dimension Chart




Units Sold across Stores
Store
Davenpo
Dublin
Portland
Syracuse
art$total.sale
0
20
40
60
80
100
5
10
15
20
art$units.sold
test


Units Sold By Store and Type of Paper
6000
4000
2000
0
UnitsSold
Davenport
Dublin
Portland
Syracuse
Store
Type
drawing
watercolor
/Users/sathishrajendiran/Documents/R/IST719/art.csv