Name- Jay Karki

Course- MCA 'B'.

Subject- R Programming.

Roll no- 66

Ans 3→

- Shampoo Sales. csv
- Selecting Working Directory
- Setwd ("C:\users\Jay / Document")
- Reading of .csv file.

  my data 1 c-read .csv ("Shampoo_Sales.csv").

- Installing ggplot package

  istall . Package ("ggplot 2")

- Using ggplot () library

  library (ggplot 2)

- Histogram

  ggplot (mydata 1, aes (y= Sales, x= month)) +

  g earn_bar (stat = "identity")

- Pie chart

  ggplot (my data 1, aes (y = "", file = sales, x = month)) +

  gearn_bar (width=1, stat = "identity") +

  coord_polar ("x", start = 0)

- box plot

```
ggplot (my data 1, aes (x= Month, y= Sales)) +
  geom = boxplot ().
```

- Scatter Plotting

```
gg plot (my data 1, aes (x=month, y= sales)) + geom.point ()
```

Ans 4. → Minimum

```
min (my data 1 $ sale)
(1)  119.3
```

Maximum

```
max (my data 1 $ sales)
[1] 682
```

Mean

```
mean (my data 1 $ sales)
(1) 312.6
```

Median

```
median (my data 1 $ sales)
[1] 280.15.
```

Quantile.

```
quantile (my data 1 $ sales, 0.75)
  75%
quantile (my data 1 $ sales, 0.25)
```

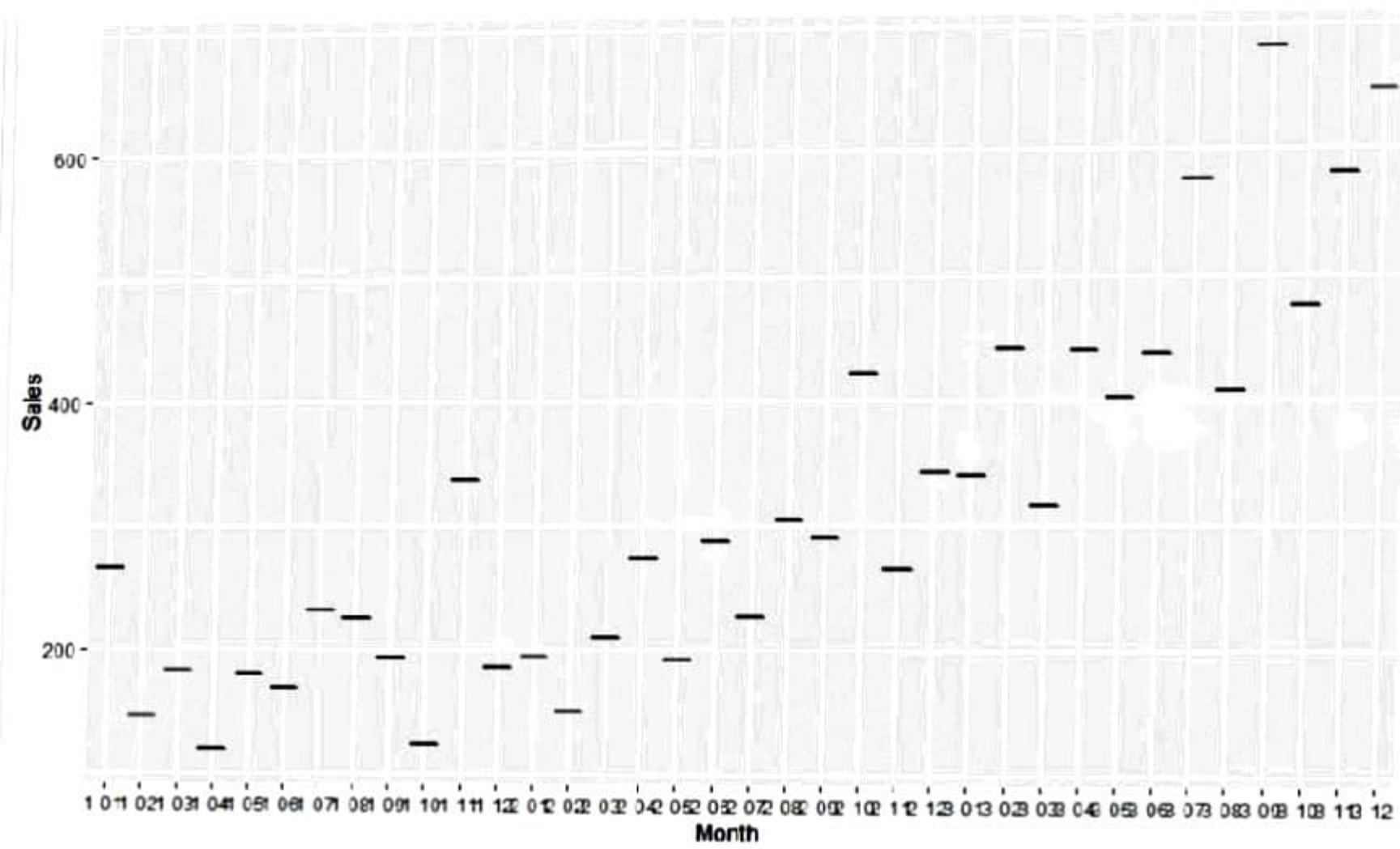
Standard deviation

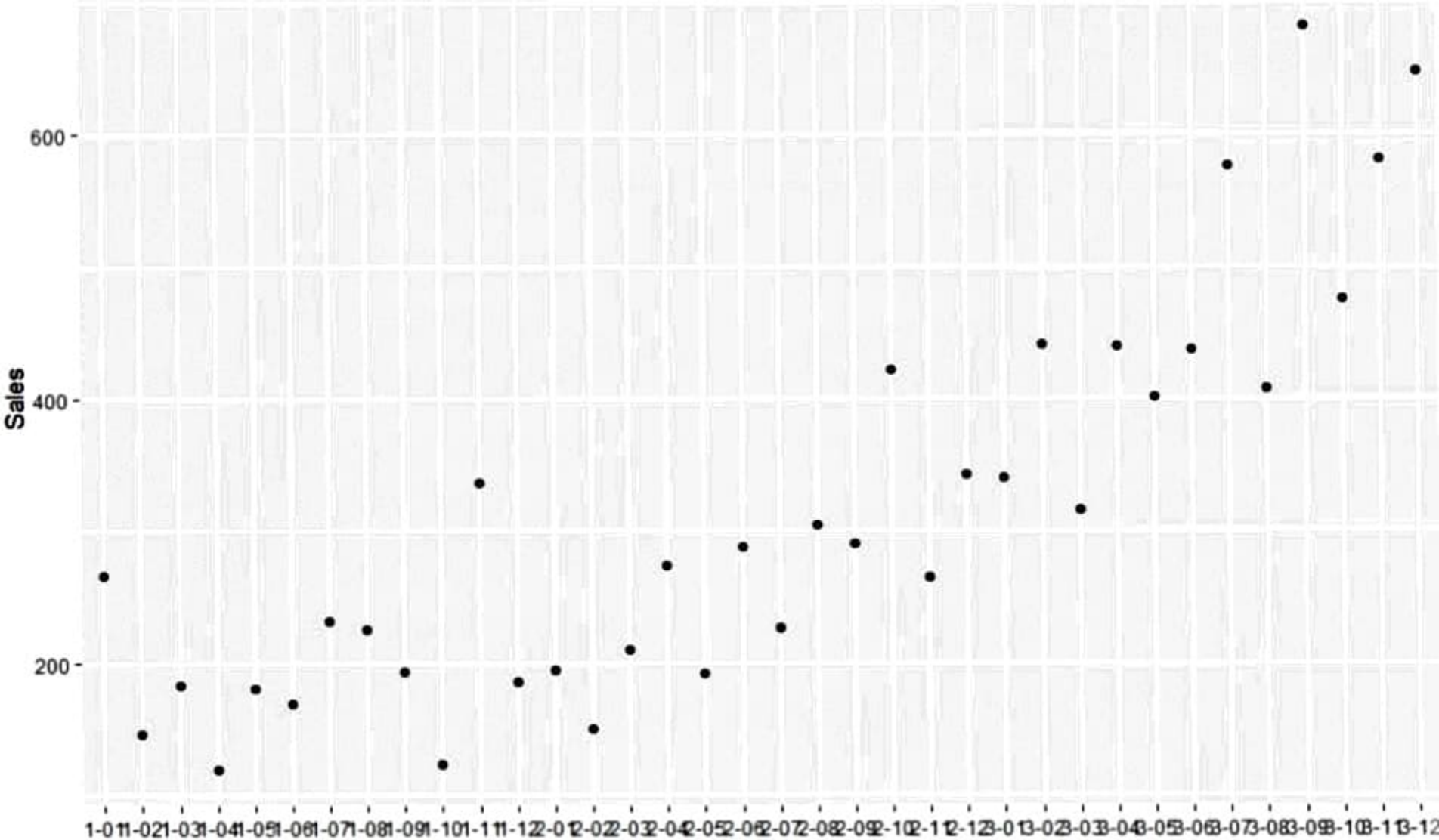
```
sd (my data 1 $ sales)
(1) 148.9372.
```

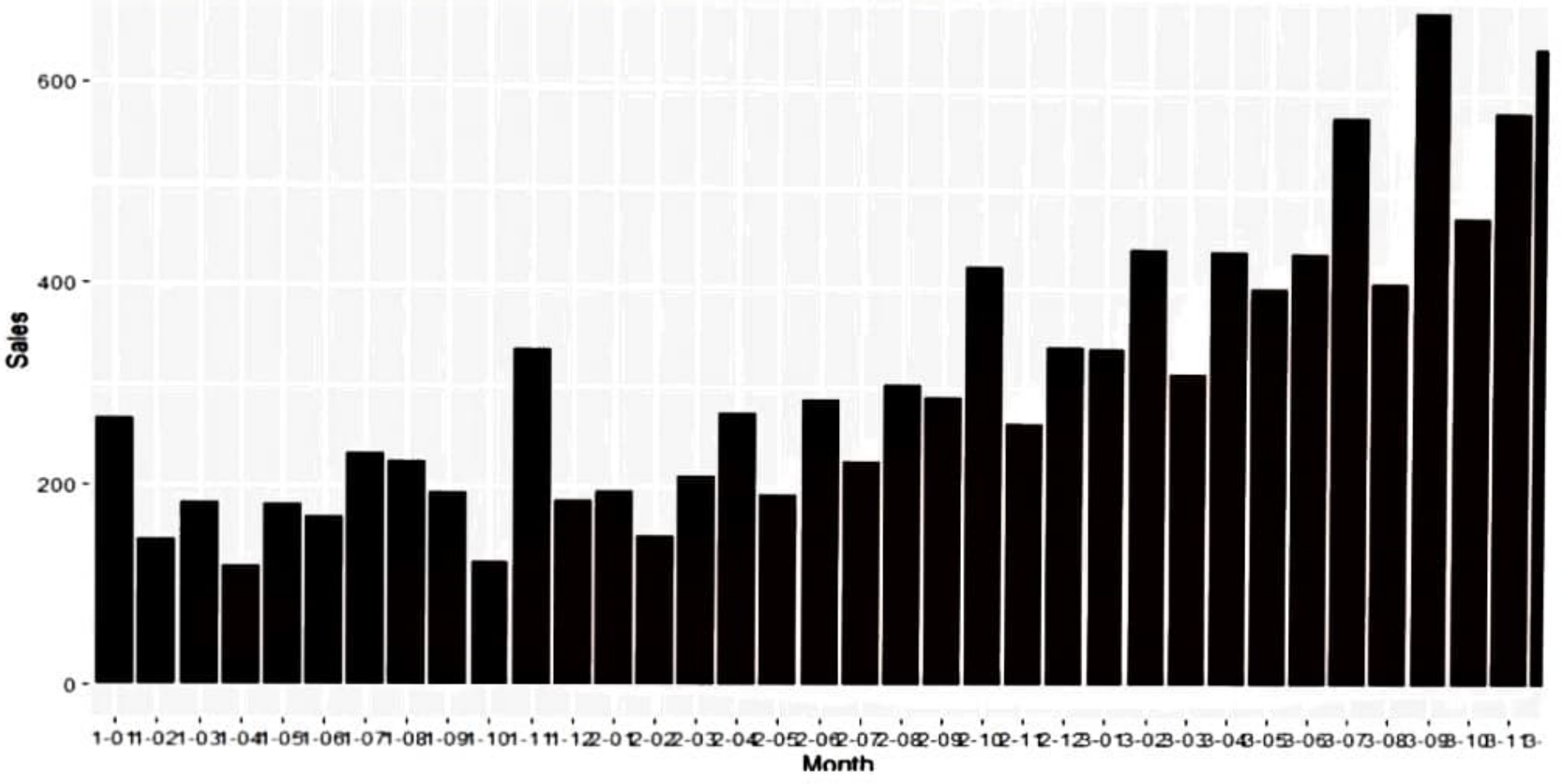
Variance

Var(my data $ sales)

(1) 22102.28.


600
400
200
Sales
Month


600
400
200
Sales
Month


600
400
200
0
Sales
1-01
1-02
1-03
1-04
1-05
1-06
1-07
1-08
1-09
1-10
1-11
1-12
2-01
2-02
2-03
2-04
2-05
2-06
2-07
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2-11
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3-01
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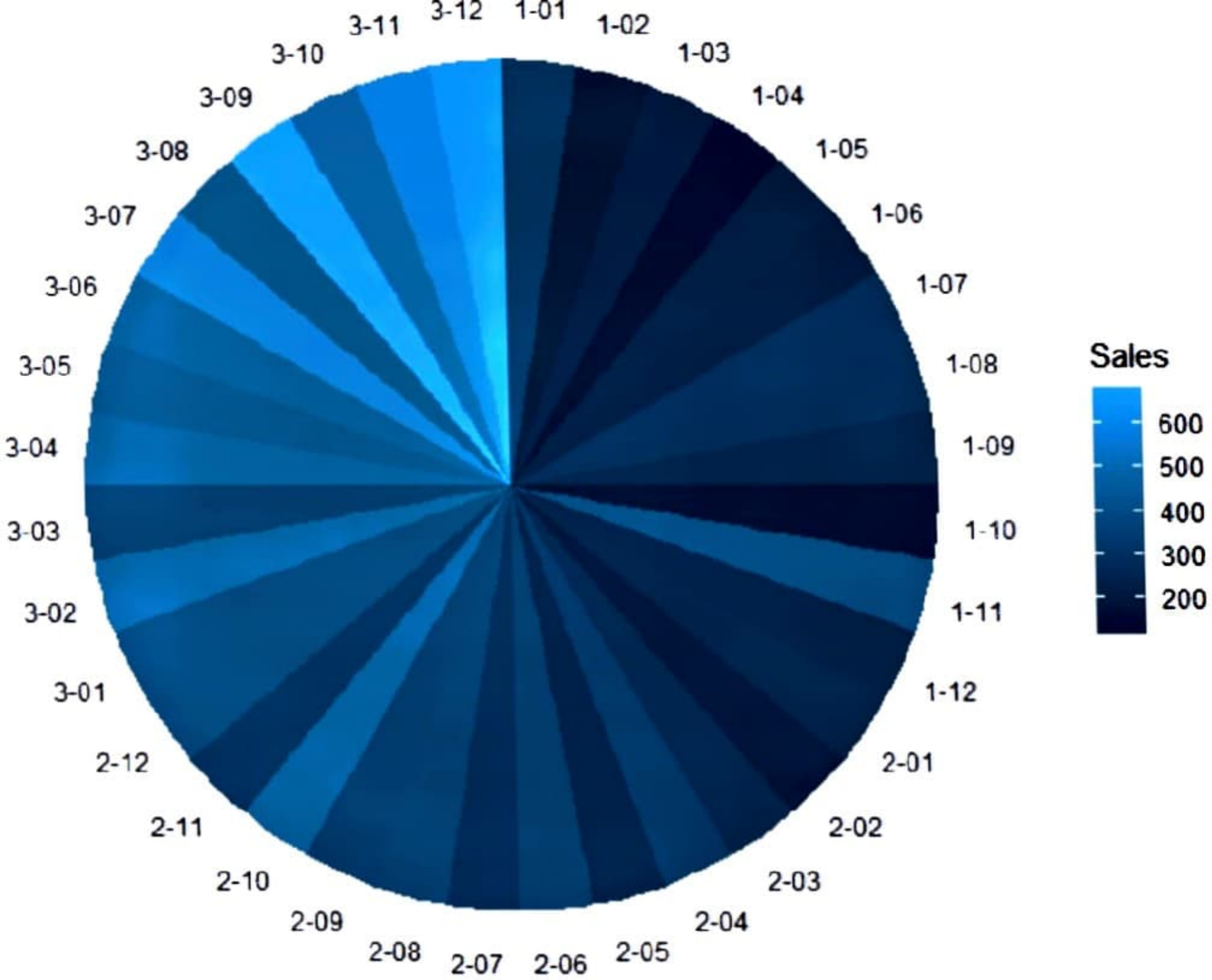
3-10
3-11
3-
Month


1-01
1-02
1-03
1-04
1-05
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1-12
2-01
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2-11
2-12
3-01
3-02
3-03
3-04
3-05
3-06
3-07
3-08
3-09
3-10
3-11
3-12
Sales
600
500
400
300
200

```
> min(mydata1$Sales)
[1] 119.3
> max(mydata1$Sales)
[1] 682
> mean(mydata1$Sales)
[1] 312.6
> median(mydata1$Sales)
[1] 280.15
> quantile(mydata1$Sales,0.75)
  75%
411.1
> quantile(mydata1$Sales,0.25)
   25%
192.45
> sd(mydata1$Sales)
[1] 148.9372
> var(mydata1$Sales)
[1] 22182.28
> summary(mydata1)
```