practice

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IE 421 hw 1

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r markdown practice

```
load("C:/Users/Selimhan/Desktop/shippingData.RData")
```

```
library(knitr)
library(rmarkdown)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(ggplot2)
```

Question 1

```
##
##           Back order Late On time
##   Central          6    6      93
##   Eastern          8    9      92
##   Western          3    0     102
```

a pipe

```
## # A tibble: 3 x 6
##   `shippingData$Center` count mean_days std_days mean_distance std_distance
##   <fct>                <int>     <dbl>    <dbl>         <dbl>        <dbl>
## 1 Central                105      3.98     1.28          253.        100.
## 2 Eastern                109      4.45     1.25          283.        107.
## 3 Western                105      2.98     1.09          251.         89.0
```

filtering late and on time deliveries

Latest delivery is :

```
late_deliveries <- filter(shippingData , Status == "Late")

min(late_deliveries$Days)
```

```
## [1] 6.07847
```

Fastest delivery is :

```
on_time_deliveries <- filter(shippingData , Status == "On time")

max(on_time_deliveries$Days)
```

```
## [1] 5.98264
```

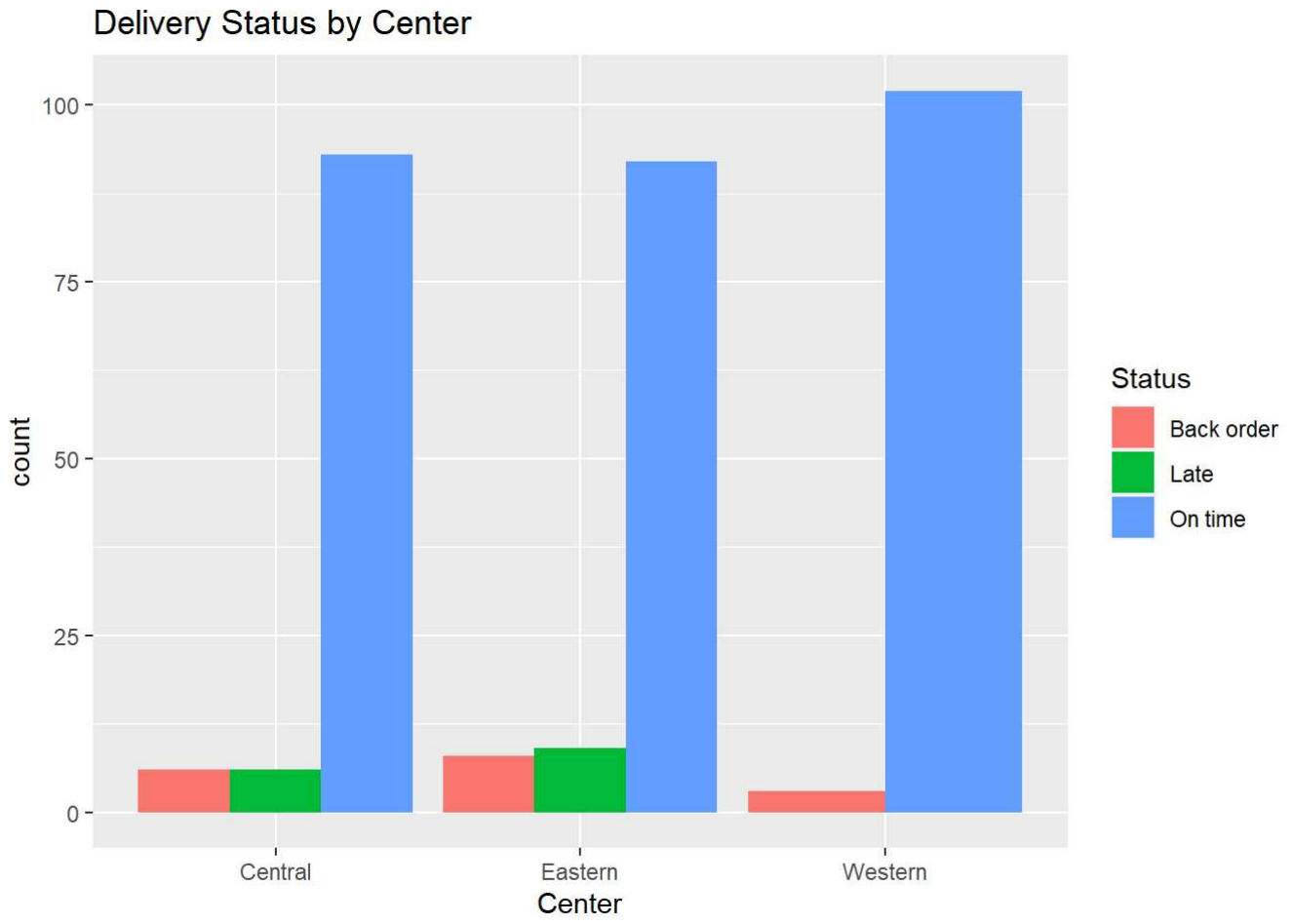
additional late deliveries if promised time was 5 days

```
abs(count(filter(shippingData , Status == "Late")) - count(filter(shippingData , Days > 5)))
```

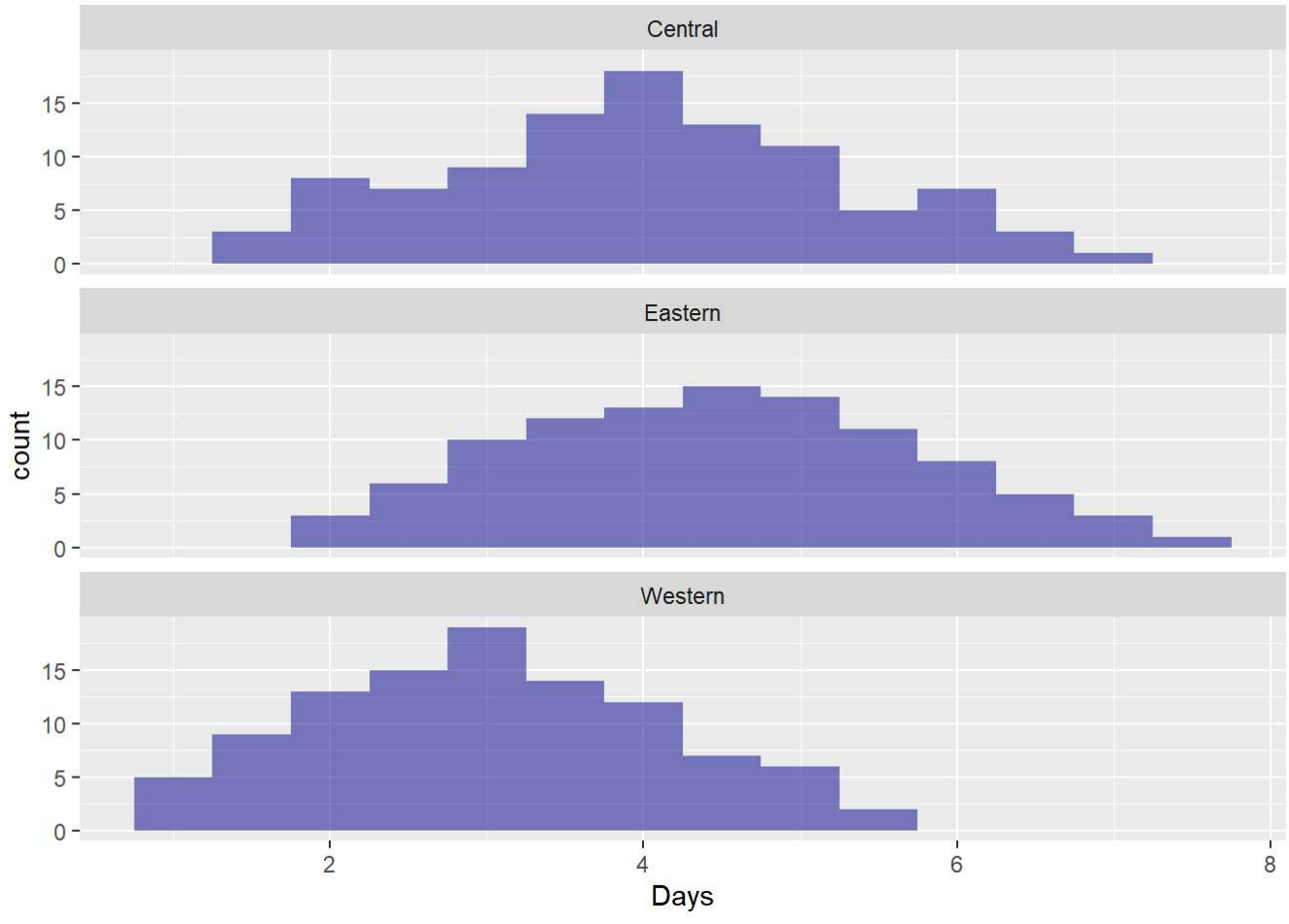
```
##    n
## 1 46
```

graphing delivery status

```
ggplot(shippingData) + geom_bar(mapping = aes(x = Center , fill = Status) , position = "dodg
e") + ggtitle("Delivery Status by Center")
```



Histogram graph



scatter plot

```
## Warning: Removed 17 rows containing missing values (geom_point).
```