

3월 16일 숙제

CHOE

2018.3.16

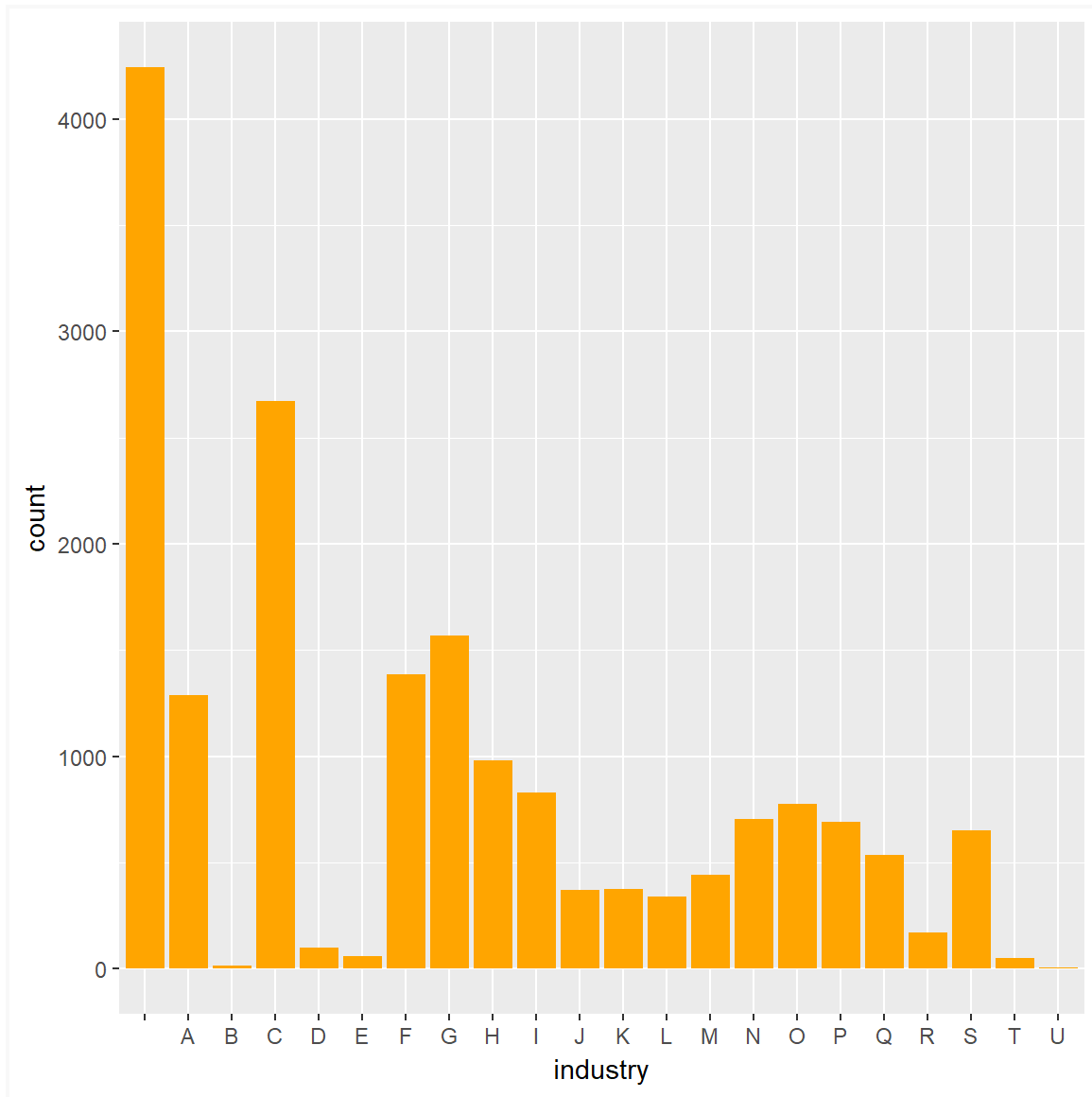
이전에 다운 받아서 만든 **dt**를 사용해서 다음의 문제를 푸시오. **html**로 니팅해서 보내시오.

```
dt <- read.csv("C:/2018-2/wo/dt.csv", header=TRUE)
View(dt)
```

1 문제 1

industry의 막대그래프를 그리시오.

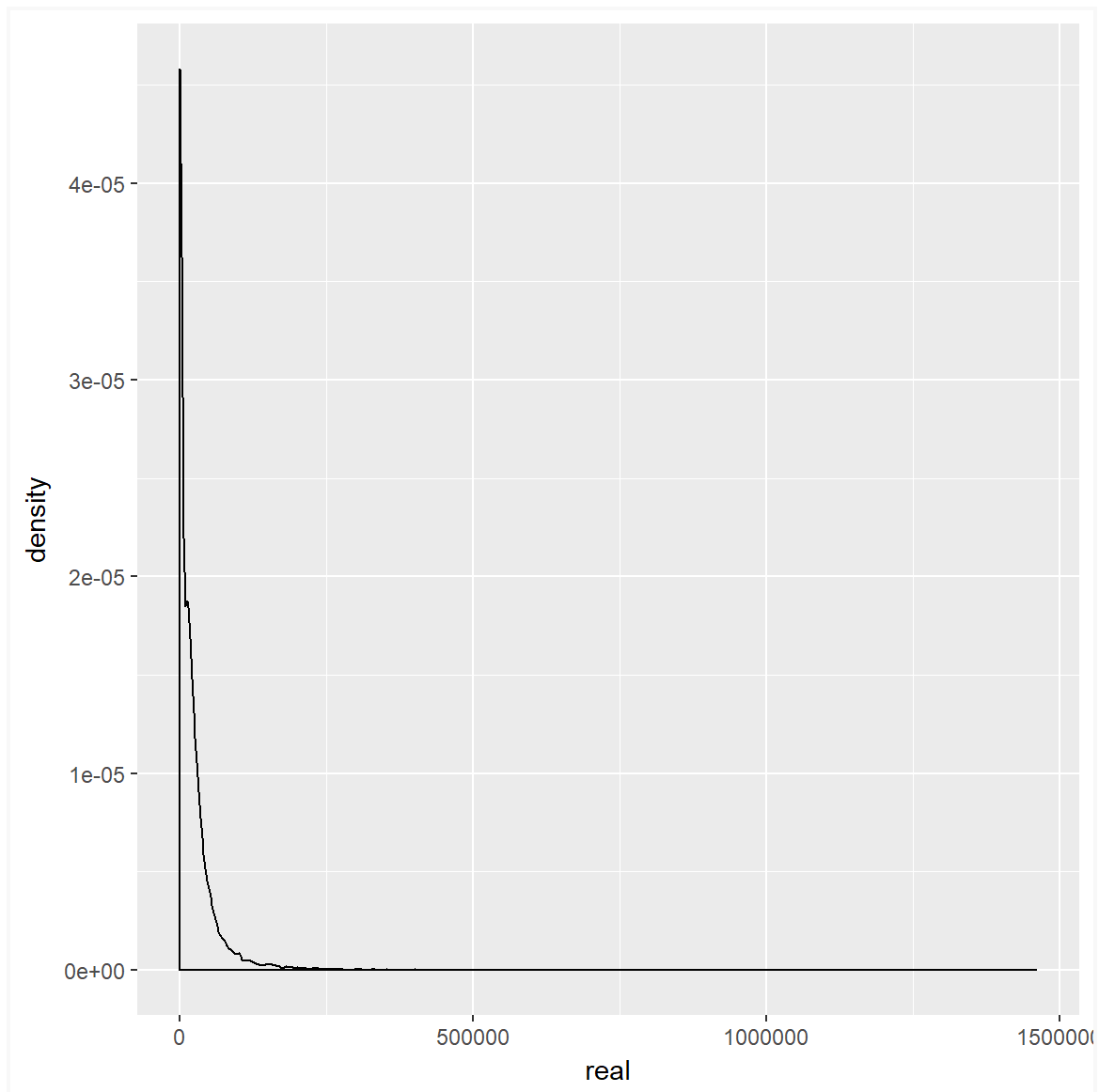
```
library(ggplot2)
ggplot(data = dt) + geom_bar(aes(x=industry), stat="count",
fill="orange")
```



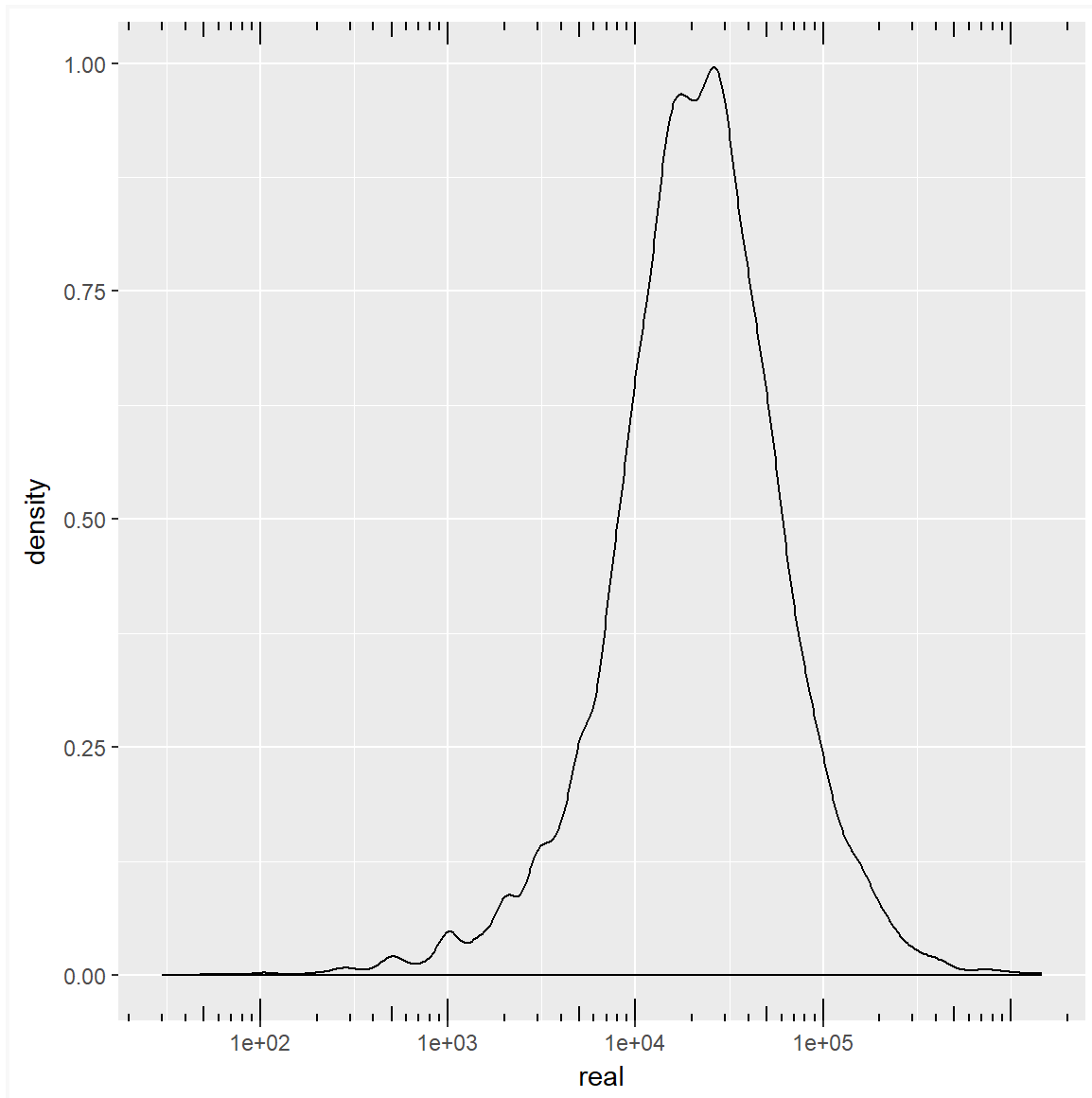
2 문제 2

`real`의 밀도곡선을 그리시오.

```
#1
ggplot(dtt) + geom_density(aes(x=real))
```



```
#2
ggplot(dtt) + geom_density(aes(x=real)) +
  scale_x_log10(breaks=c(100,1000,10000,100000)) +
  annotation_logticks(sides="bt")
## Warning: Transformation introduced infinite values in continuous
x-axis
## Warning: Removed 5603 rows containing non-finite values
(stat_density).
```

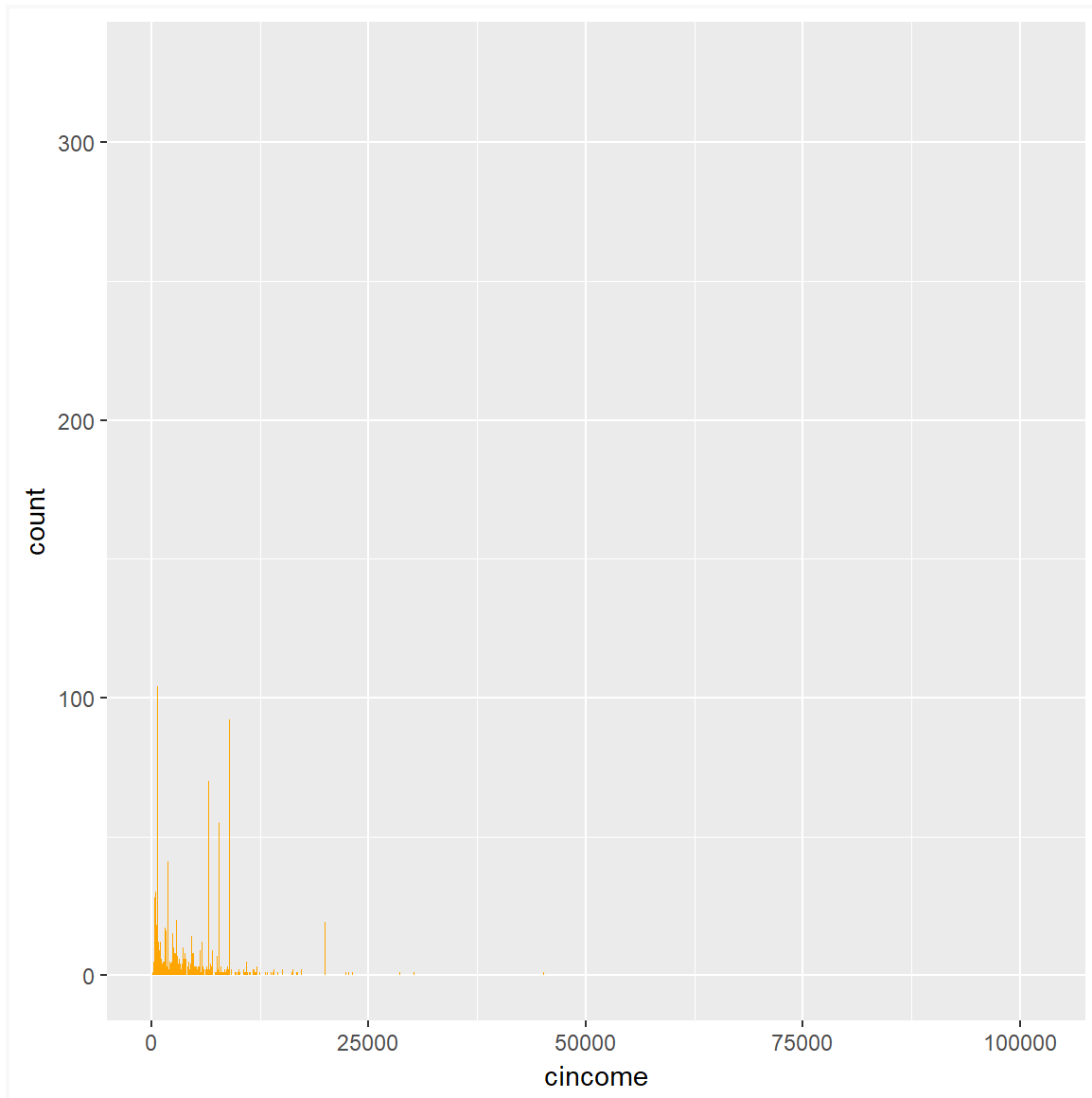


```
dt$logreal = log(dt$real)
```

3 문제 3

cincome의 히스토그램을 그리시오.

```
library(ggplot2)
ggplot(dt, aes(x=cincome))+geom_histogram(binwidth=5, fill="orange")
```



4 문제 4

cincome의 0%~100%까지 1% 단위로 분위수(경상소득의 분포)를 구하시오.

```
q1=quantile(dtt$cincome, probs = seq(0,1, by=0.01))
```

```
q1
```

```
##           0%           1%           2%           3%           4%           5%
```

```
6%
```

```
##           0.00          274.88          362.00          442.00          482.00          540.00
```

```
582.00
```

```
##           7%           8%           9%           10%          11%          12%
```

13%
602.00 648.00 702.00 740.00 800.00 844.00
904.00
14% 15% 16% 17% 18% 19%
20%
972.00 1040.00 1104.52 1189.24 1220.00 1307.36
1388.00
21% 22% 23% 24% 25% 26%
27%
1442.00 1515.68 1596.00 1683.28 1800.00 1804.00
1920.00
28% 29% 30% 31% 32% 33%
34%
2000.00 2050.00 2160.00 2240.00 2328.08 2400.00
2413.00
35% 36% 37% 38% 39% 40%
41%
2500.00 2580.00 2650.00 2760.00 2844.00 2955.20
3000.00
42% 43% 44% 45% 46% 47%
48%
3002.00 3120.00 3215.68 3300.00 3400.00 3500.00
3600.00
49% 50% 51% 52% 53% 54%
55%
3600.00 3700.00 3800.00 3900.00 4000.00 4020.00
4140.00
56% 57% 58% 59% 60% 61%
62%
4200.00 4300.00 4406.52 4500.00 4600.00 4703.84
4800.00
63% 64% 65% 66% 67% 68%
69%
4912.36 5000.00 5040.00 5160.00 5281.44 5400.00
5518.72
70% 71% 72% 73% 74% 75%
76%
5664.00 5811.20 6000.00 6000.00 6155.56 6300.00
6500.00
77% 78% 79% 80% 81% 82%
83%
6600.00 6820.32 7000.00 7160.00 7320.00 7500.00
7790.00
84% 85% 86% 87% 88% 89%
90%
8000.00 8140.00 8400.00 8629.64 8980.00 9207.24
9600.00
91% 92% 93% 94% 95% 96%

```

97%
## 10000.00 10300.00 10800.00 11500.00 12160.00 13000.00
14223.36
##          98%          99%          100%
## 15960.00 20000.00 102400.00

```

5 문제 5

문제 5의 소득분포를 적절하게 막대그래프로 그려 보시오.

```
barplot(q1)
```

