Assignment 3 Followup

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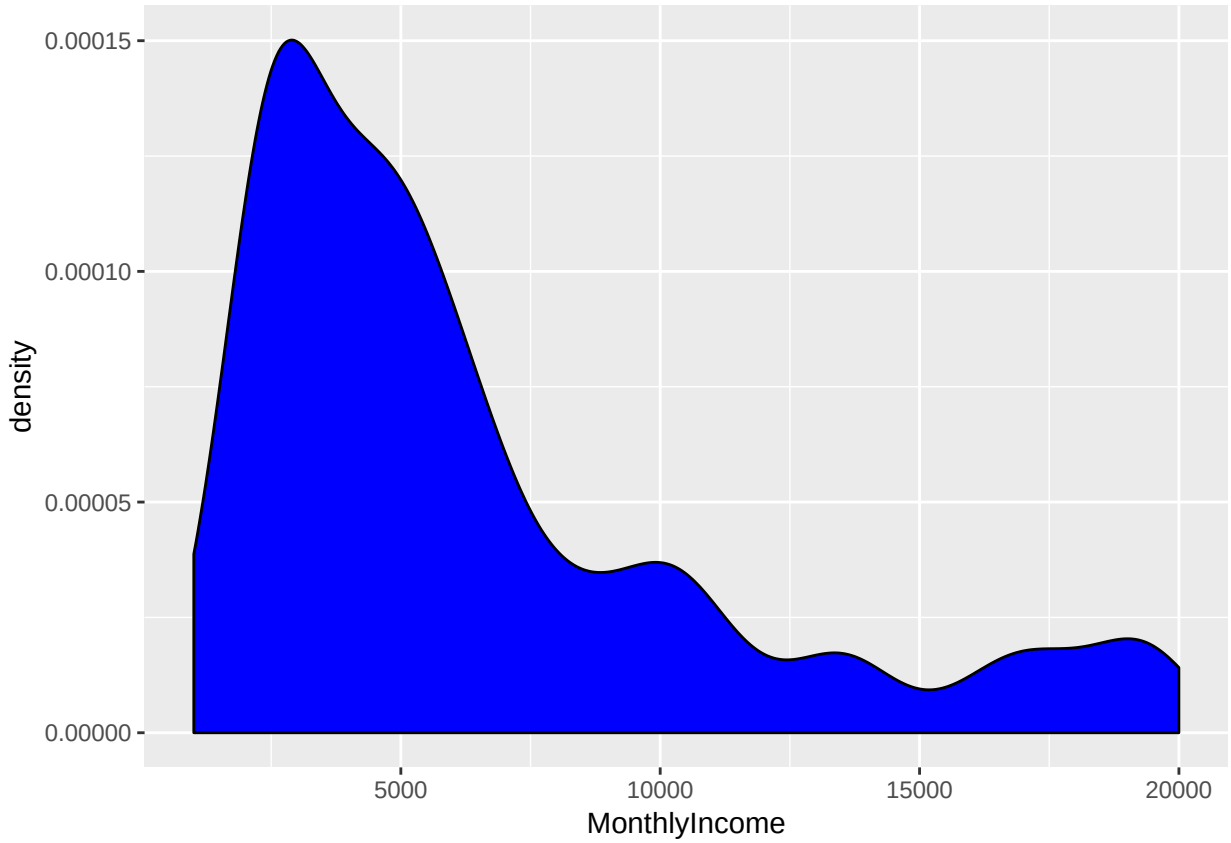
1/29/2019

Loading Data

```
load("attrition.Rdata")
```

1. Create a graph that shows the distribution of monthly income.

```
gg<-ggplot(at,aes(x=MonthlyIncome))
gg<-gg+geom_density(fill="blue")
gg
```



2. Create a graph that shows the average level of monthly income by field of education.

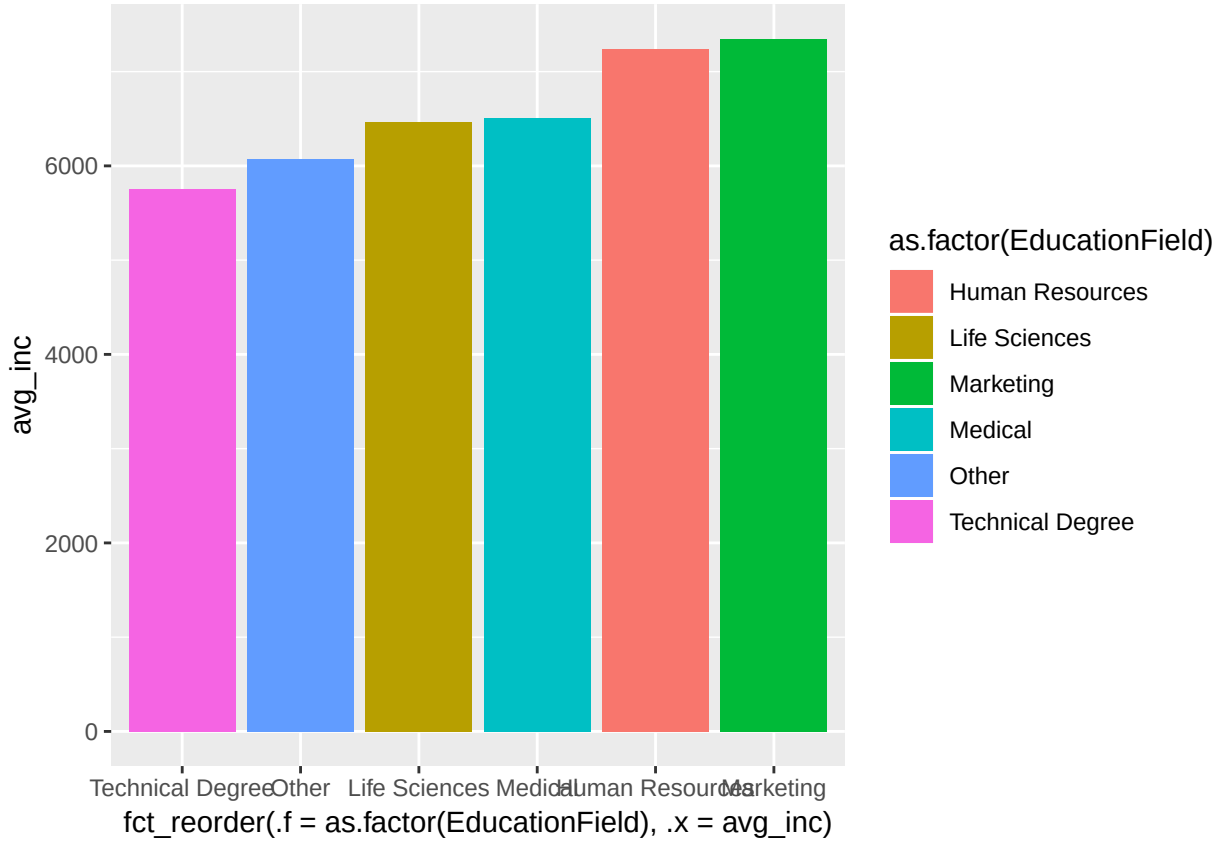
```
at_sum<-at%>%
  group_by(EducationField)%>%
  summarize(avg_inc=mean(MonthlyIncome))


at_sum
```

```
## # A tibble: 6 x 2
##   EducationField   avg_inc
```

```
##   <chr>              <dbl>
## 1 Human Resources    7241.
## 2 Life Sciences      6463.
## 3 Marketing          7349.
## 4 Medical            6510.
## 5 Other              6072.
## 6 Technical Degree   5758.
```

```
gg_education<-ggplot(at_sum,aes(x=fct_reorder(.f=as.factor(EducationField),
                                              .x=avg_inc),
                                y=avg_inc,
                                fill=as.factor(EducationField)))
## Use bar plot geometry, height of bars set by level observed in dataset
gg_education<-gg_education+geom_bar(stat="Identity")
## Print
gg_education
```

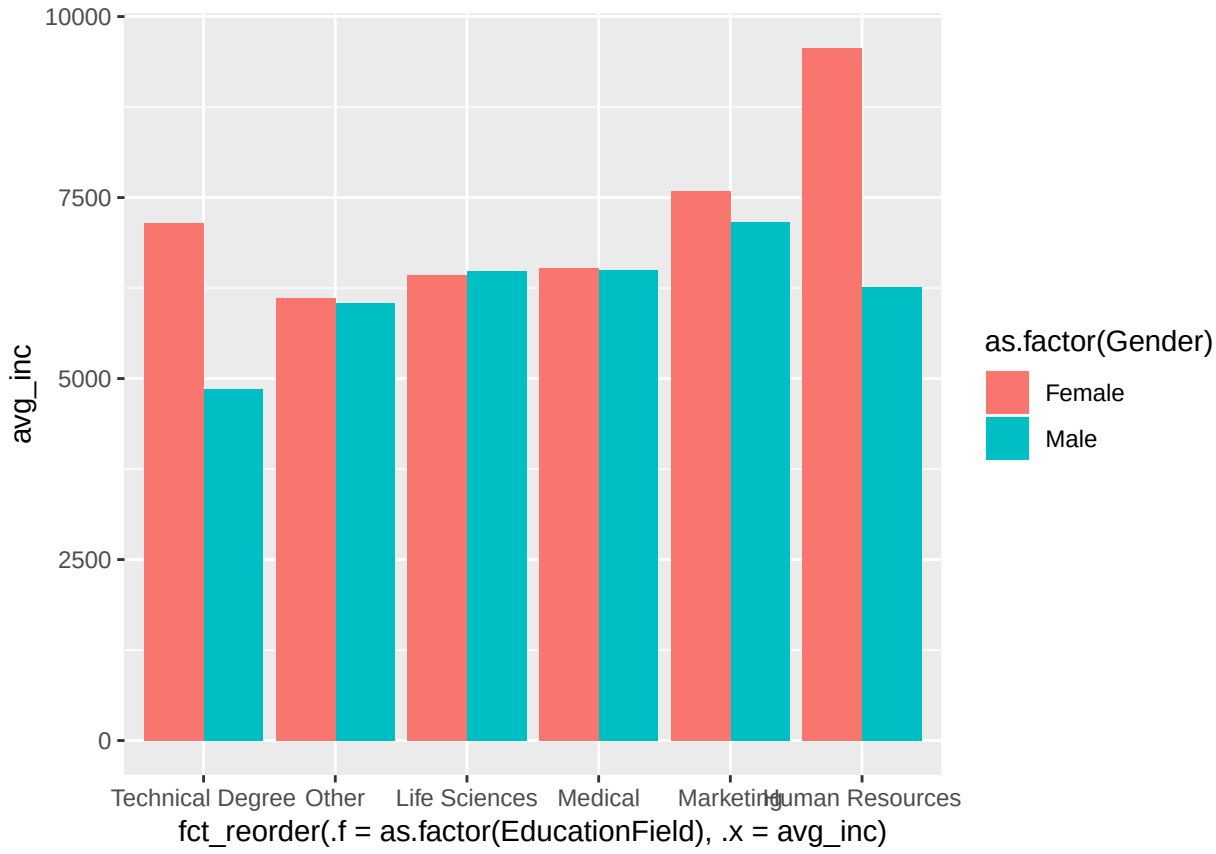


3. Create another graph that shows average level of monthly income by field of education and gender.

```
at_sum<-at%>%
  group_by(EducationField,Gender)%>%
  summarize(avg_inc=mean(MonthlyIncome))


gg<-ggplot(at_sum,aes(x=fct_reorder(.f=as.factor(EducationField),
                                              .x=avg_inc),
                                y=avg_inc,
                                fill=as.factor(Gender)))
```

```
## Use bar plot geometry, height of bars set by level observed in dataset
gg<-gg+geom_bar(stat="Identity",position="dodge")
## Print
gg
```

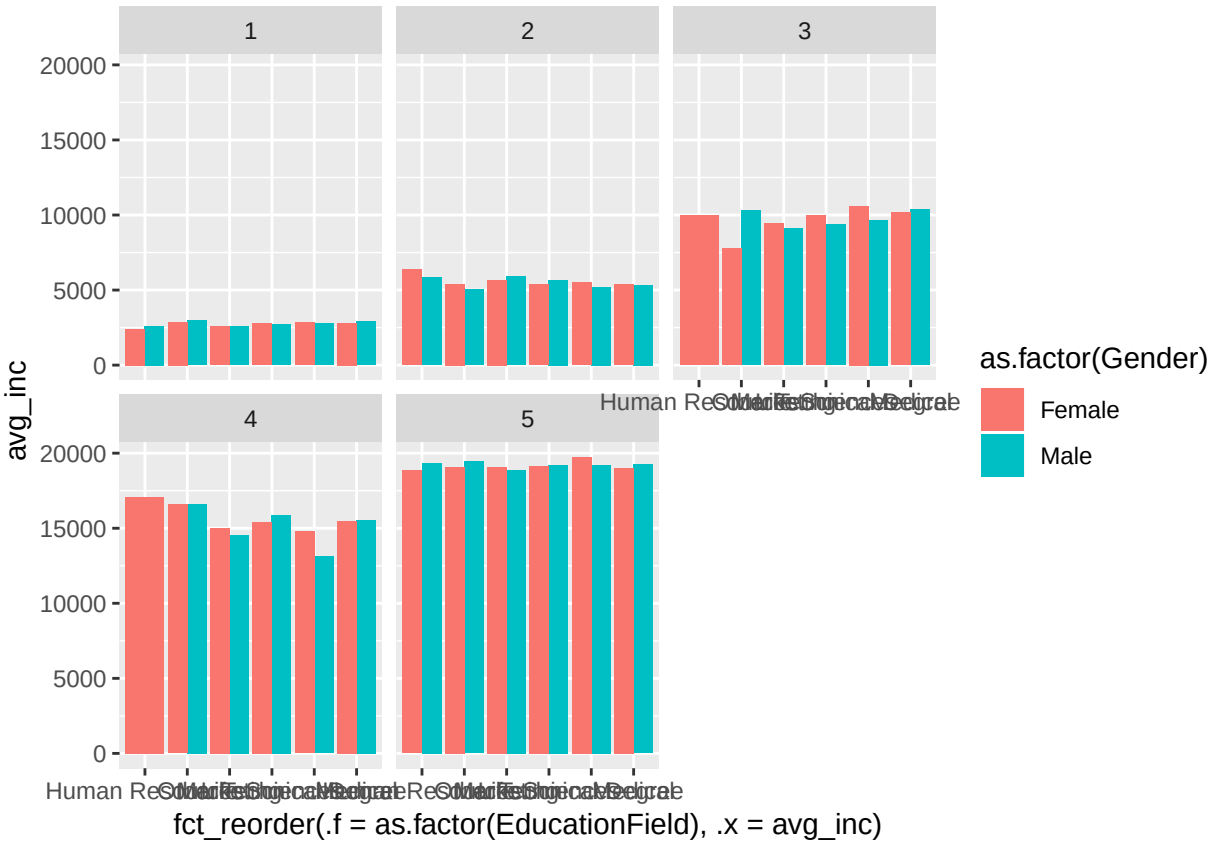


4. Create a graph that shows average levels of monthly income by field of education, gender and job level (scale of 1-5, highest ranked employees are

5)

```
at_sum<-at%>%
  group_by(EducationField,Gender,JobLevel)%>%
  summarize(avg_inc=mean(MonthlyIncome))


gg<-ggplot(at_sum,aes(x=fct_reorder(.f=as.factor(EducationField),
                                    .x=avg_inc),
                      y=avg_inc,
                      fill=as.factor(Gender)))
## Use bar plot geometry, height of bars set by level observed in dataset
gg<-gg+geom_bar(stat="Identity",position="dodge")
## Print
gg<-gg+facet_wrap(~JobLevel)
gg
```


1
2
3
4
5
20000
15000
10000
5000
0
avg_inc
as.factor(Gender)
Female
Male
fct_reorder(.f = as.factor(EducationField), .x = avg_inc)