Lab 1 Activity

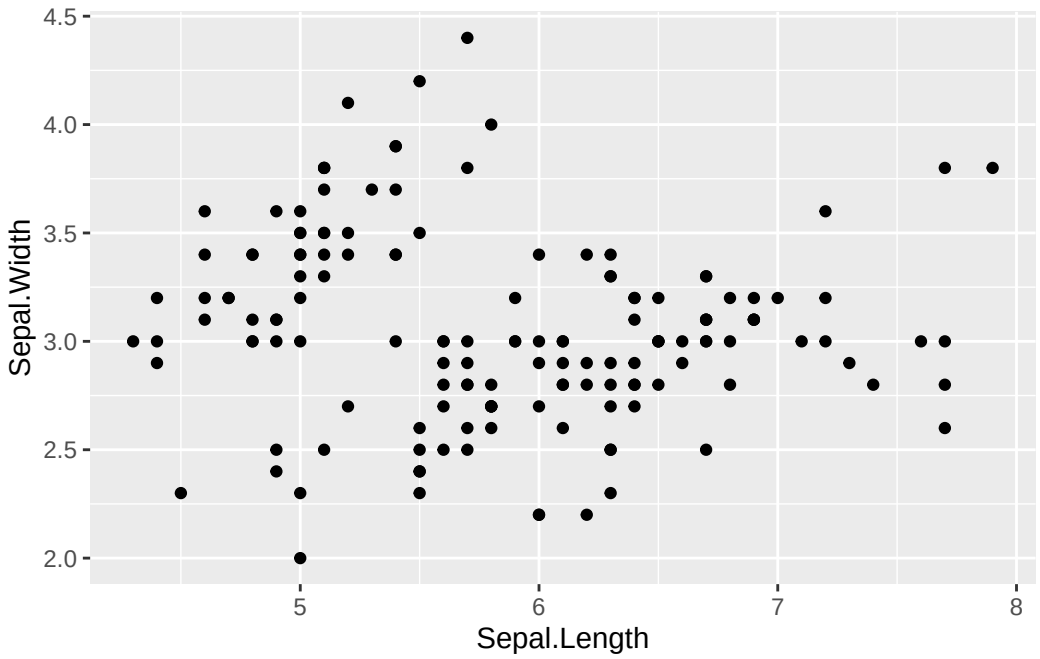
PSYC 7940

Code summary

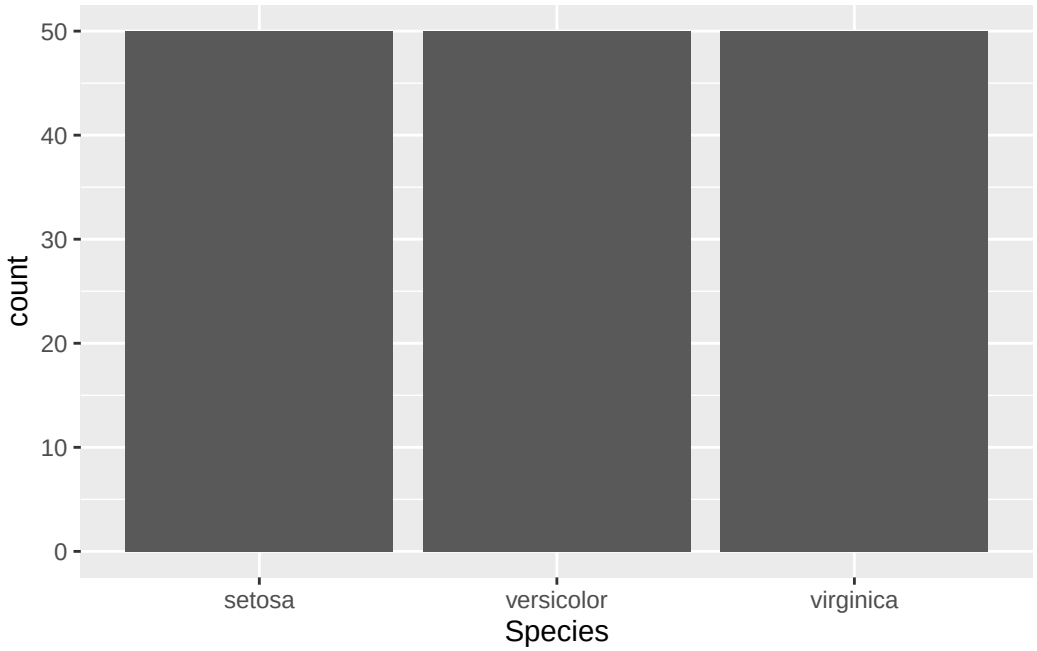
```
library(ggplot2)
```

```
data <- iris

data2 <- read.csv("Titanic_Survival.csv")
```

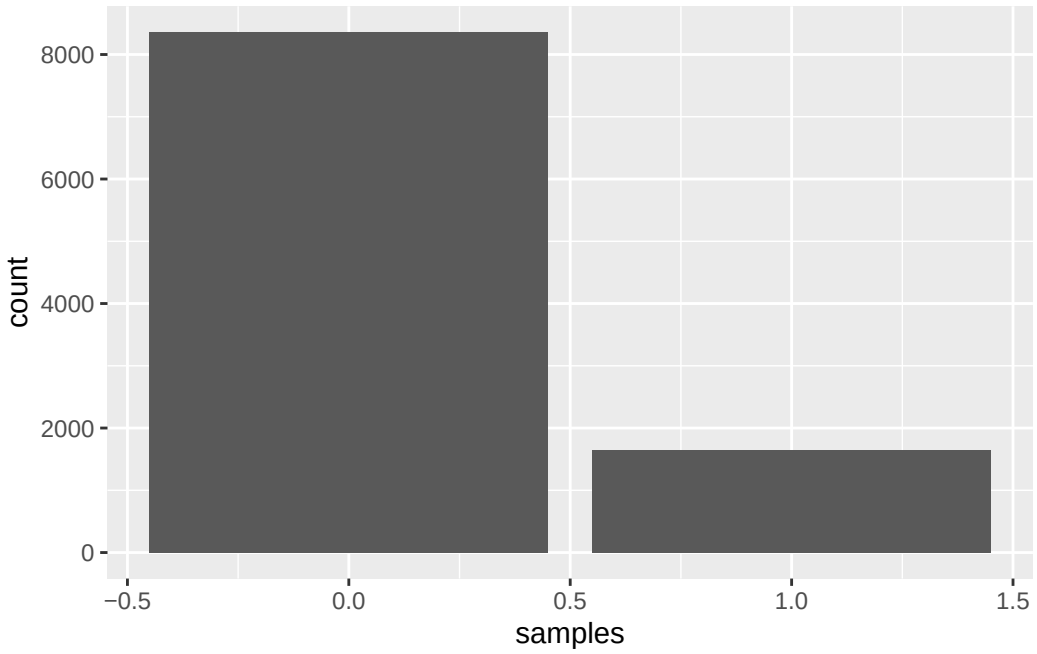
```
ggplot(data, aes(x = Sepal.Length, y = Sepal.Width))+
  geom_point()
```



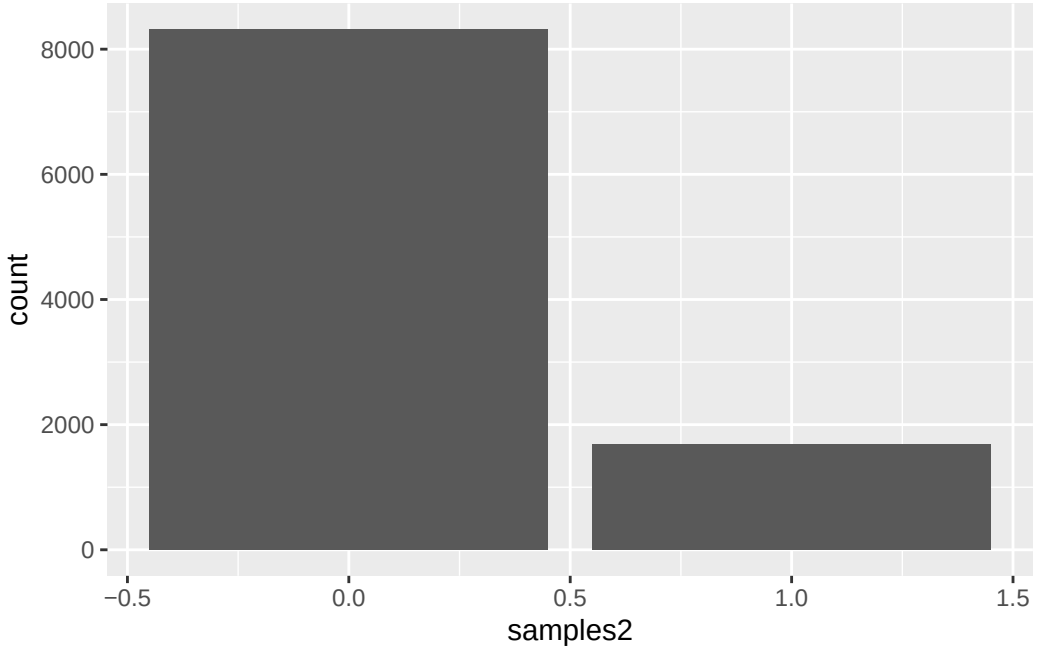
```r
ggplot(data, aes(Species))+
  geom_bar()
```



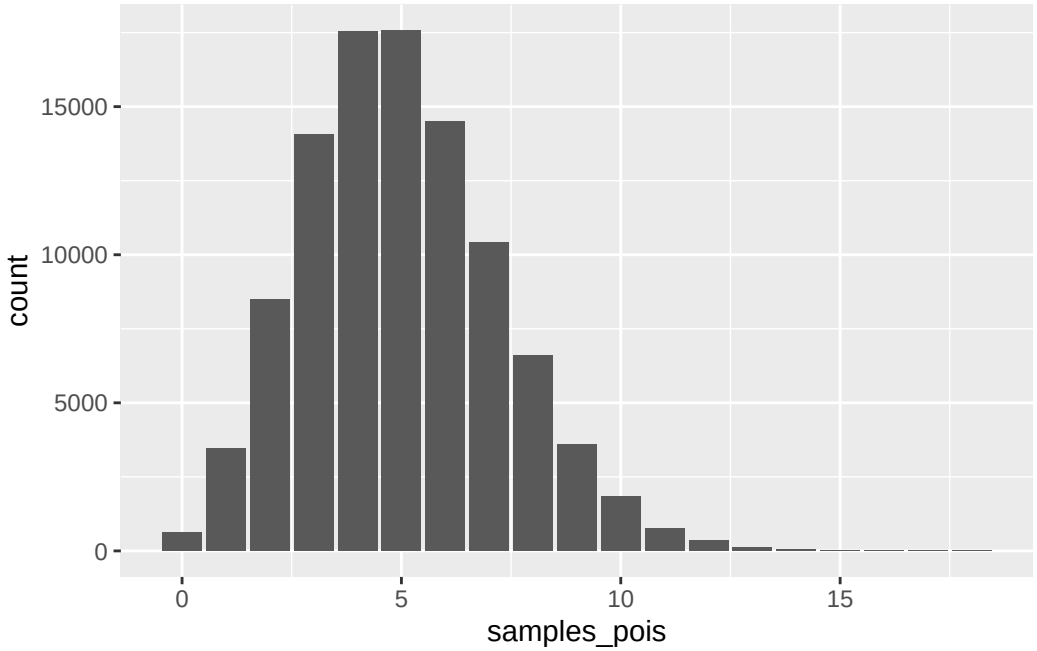

```r
set.seed(8785)

samples <- sample(x = c(0,1),
size = 1e4,
replace = TRUE,
prob = c(5/6, 1/6))

samples<-as.data.frame(samples)

ggplot(samples, aes(x=samples))+
  geom_bar()
```




```r
samples2<-rbinom(1e4, size = 1, prob = 1/6)
samples2<-data.frame(samples2)
ggplot(samples2, aes(x=samples2))+
  geom_bar()
```



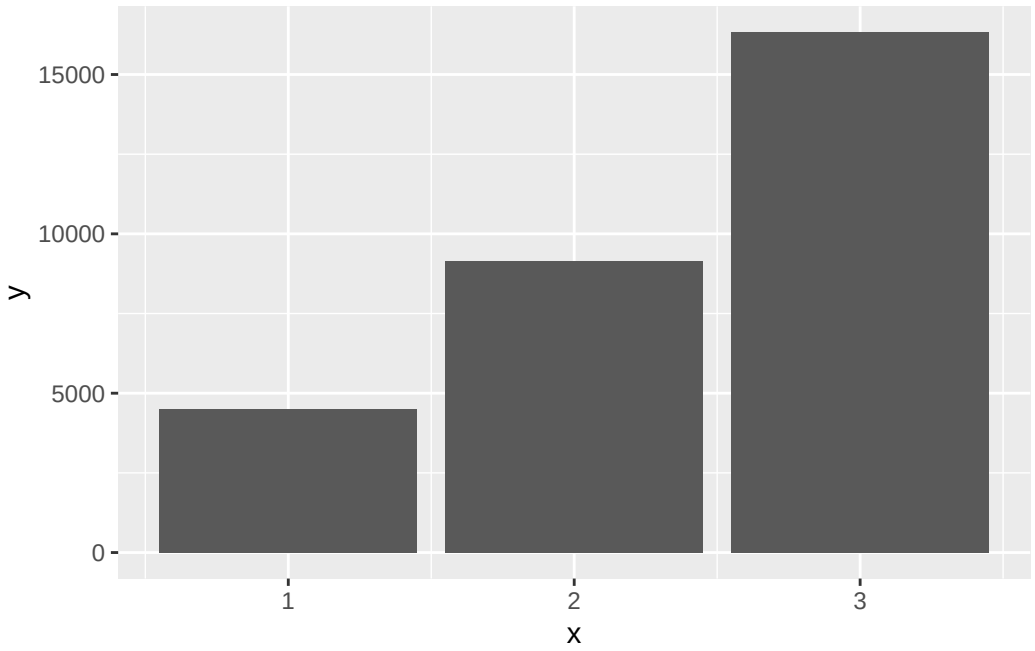
```r
samples_pois<-rpois(1e5, lambda = 5) #Simulate dataset

samples_pois<-data.frame(samples_pois)

ggplot(samples_pois, aes(x=samples_pois))+
  geom_bar()
```



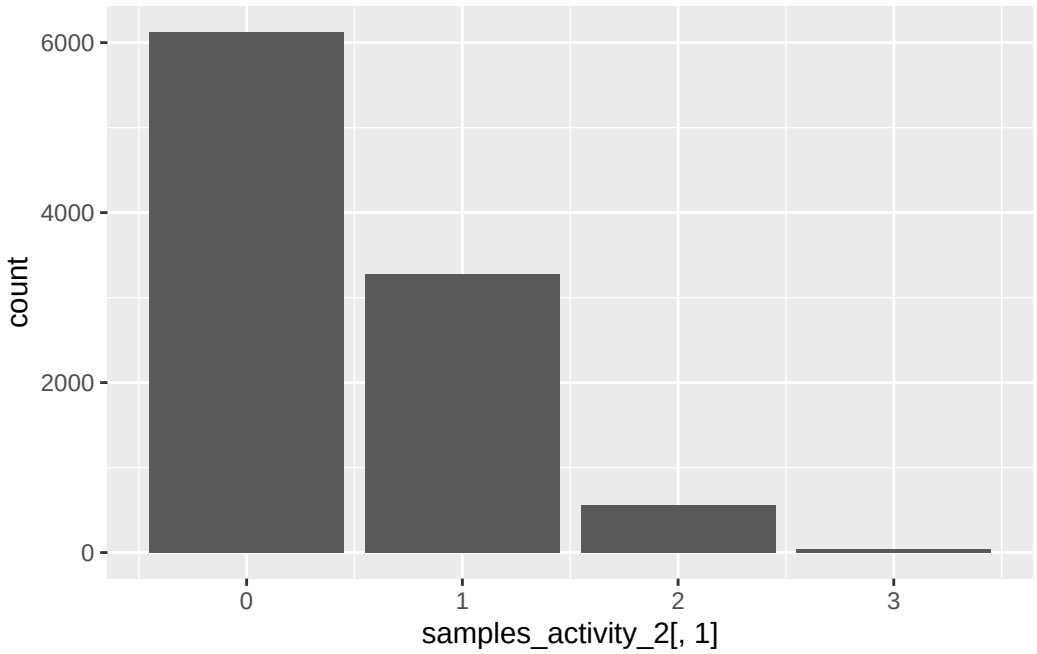
Activity

- Take the multinomial for example

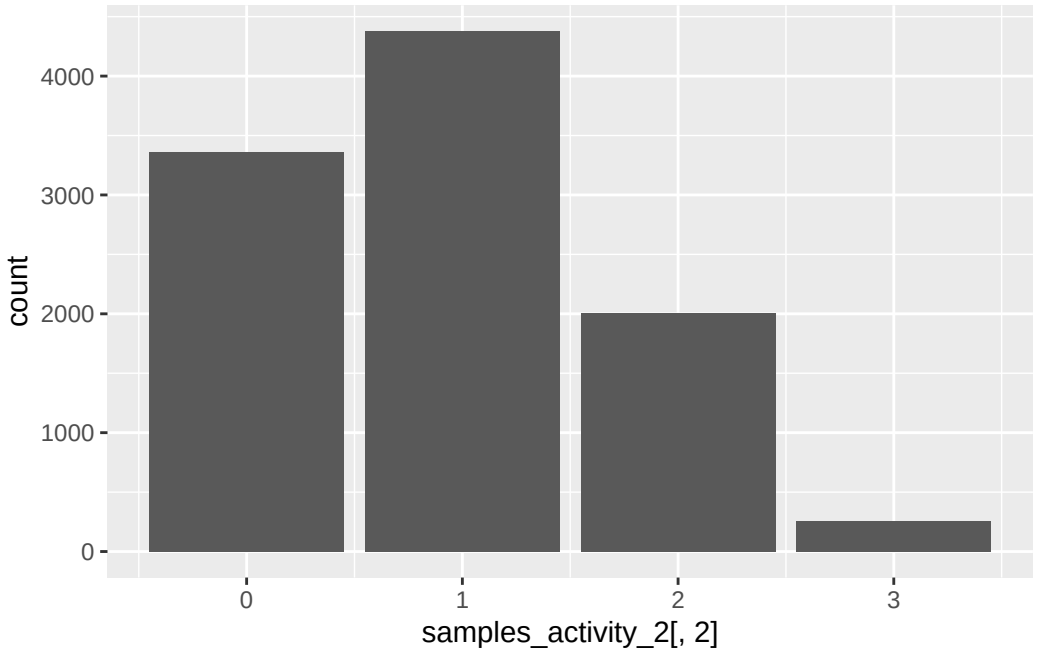
```r
samples_activity<-rmultinom(1e4, size = 3, prob = c(2,4,7))

#I can sum each row and visulize the summation value in one figure.

act_sum<-rowSums(samples_activity)
samples_activity_1<-data.frame(x = c(1:3),
                               y = act_sum)

ggplot(samples_activity_1, aes(x=x, y=y))+
  geom_col()
```




```
#Or I can visualize each event using three figures.

#ggplot does not handle rows well, please put the data you want to visualize on columns using

samples_activity_2<-as.data.frame(t(samples_activity))

ggplot(samples_activity_2, aes(x = samples_activity_2[,1]))+
  geom_bar()
```




```
ggplot(samples_activity_2, aes(x = samples_activity_2[,2]))+
  geom_bar()
```



```
ggplot(samples_activity_2, aes(x = samples_activity_2[,3]))+
  geom_bar()
```