



**EDUCACIÓN**  
SECRETARÍA DE EDUCACIÓN PÚBLICA



TECNOLÓGICO  
NACIONAL DE MÉXICO



**Instituto Tecnológico de Tijuana  
Ingeniería en Informática**

**Subject Name:**

**Data Mining**

**Exercise:**

**Evaluative Practice 1 - Unit 2**

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## Practice 1

Investigate 3 geometry functions that can be added to the ggplot2 () function

we must first import the data

```
getwd()  
setwd("C:\\Users\\Cylon\\Desktop\\csv\\MineriadeDatos\\Unidad 2\\Practice 1")  
getwd()
```

```
movies <- read.csv("P2-Movie-Ratings.csv")
```

we rename the columns to make them look more aesthetic

```
colnames(movies) <- c("Film", "Genre", "CriticRating", "AudienceRating",  
"BudgetMillions", "Year")  
head(movies)
```

Convert numeric data to a factor

```
factor(movies$Year)  
movies$Year <- factor(movies$Year)
```

We call the library that we are going to use

```
library(ggplot2)
```

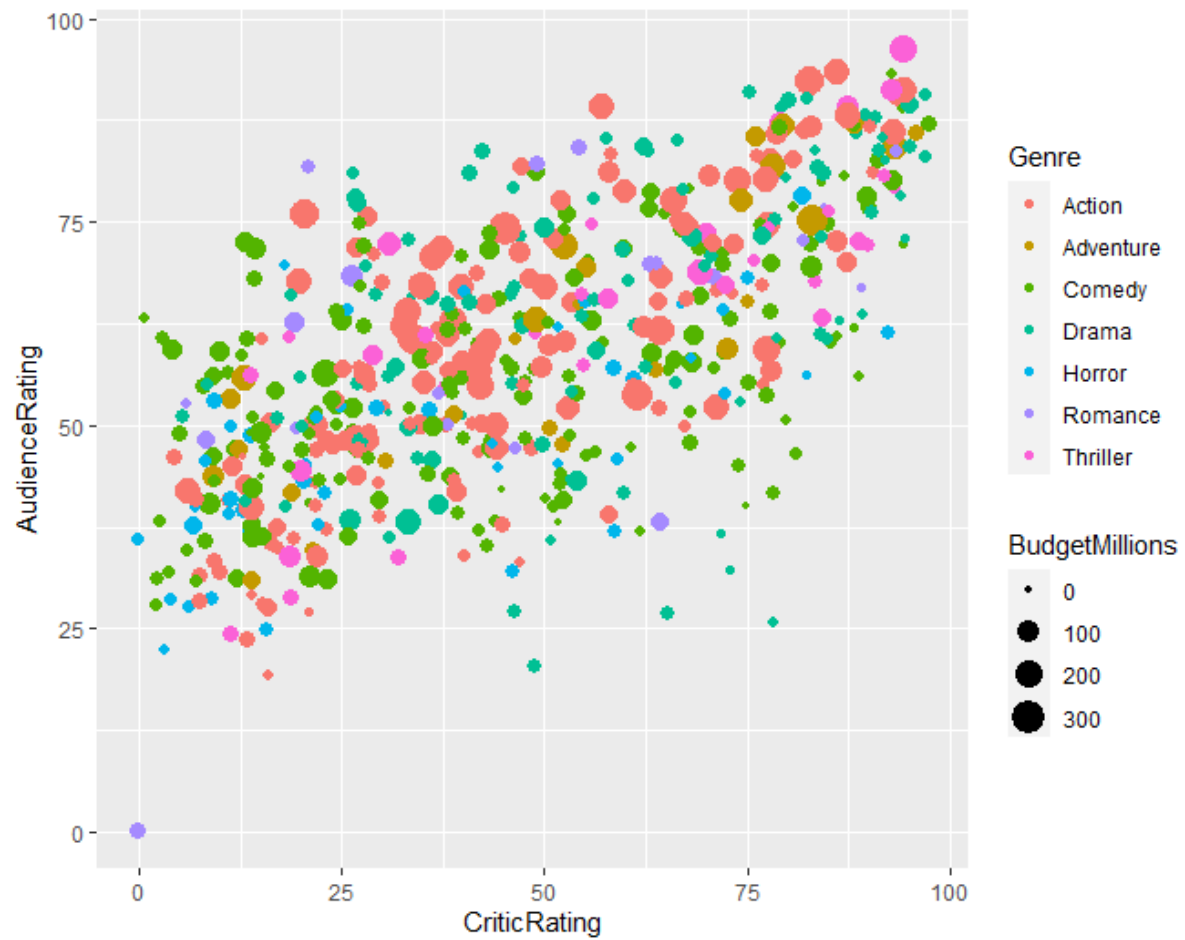
we create our scatter plot with the ggplot function adding color and size

```
ggplot(movies, aes(x=CriticRating, y=AudienceRating,  
color=Genre, size=BudgetMillions))
```

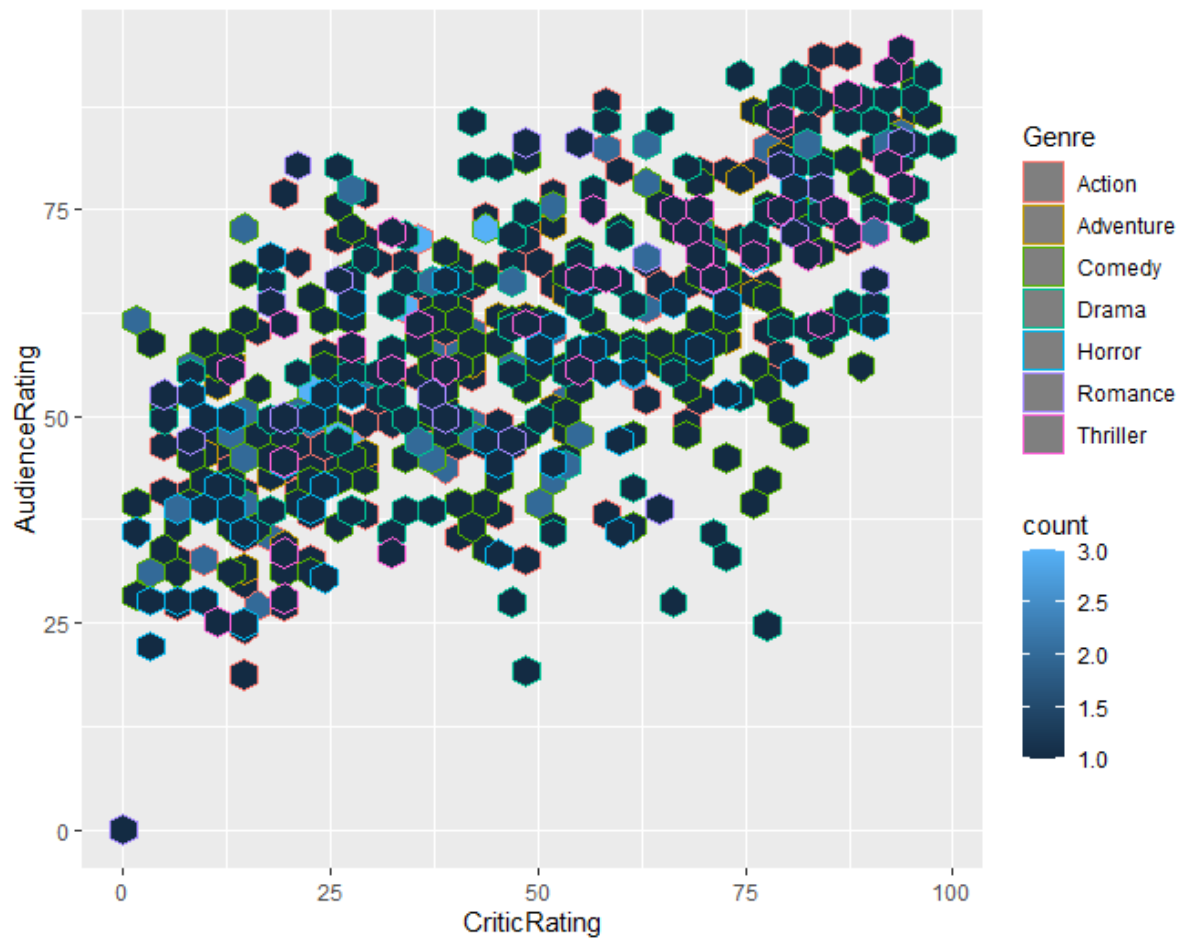
add geometry

1) geom\_jitter()

```
ggplot(movies, aes(x=CriticRating, y=AudienceRating,  
color=Genre, size=BudgetMillions)) +  
geom_jitter()
```



```
2) geom_hex()
ggplot(movies, aes(x=CriticRating, y=AudienceRating,
                  color=Genre, size=BudgetMillions)) +
  geom_hex()
```



```
3) geom_polygon()
ggplot(movies, aes(x=CriticRating, y=AudienceRating,
                  color=Genre, size=BudgetMillions)) +
  geom_polygon()
```

