# Nintendo Sales

Gigi

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## Video Game Sales

For this analysis, I am isolating the Nintendo publisher sales from the Video Game Sales data set. Data is of games with sales greater than 100,00 and sales are in millions. Data downloaded from: https://www.kaggle.com/datasets/gregorut/videogamesales

### Loading necessary packages

```
library(tidyverse)
library(dplyr)
library(magrittr)
```

### Importing and previewing the Video Games dataset

```
vg_sales <- read.csv('vgsales.csv')
head(vg_sales)
```

```
##   Rank                     Name Platform Year        Genre Publisher NA_Sales
## 1    1               Wii Sports      Wii 2006       Sports  Nintendo    41.49
## 2    2        Super Mario Bros.      NES 1985     Platform  Nintendo    29.08
## 3    3           Mario Kart Wii      Wii 2008       Racing  Nintendo    15.85
## 4    4        Wii Sports Resort      Wii 2009       Sports  Nintendo    15.75
## 5    5 Pokemon Red/Pokemon Blue       GB 1996 Role-Playing  Nintendo    11.27
## 6    6                   Tetris       GB 1989       Puzzle  Nintendo    23.20
##   EU_Sales JP_Sales Other_Sales Global_Sales
## 1    29.02     3.77        8.46        82.74
## 2     3.58     6.81        0.77        40.24
## 3    12.88     3.79        3.31        35.82
## 4    11.01     3.28        2.96        33.00
## 5     8.89    10.22        1.00        31.37
## 6     2.26     4.22        0.58        30.26
```

**Filter vg_sales for Nintendo publisher**

```
nintendo_sales <- vg_sales %>% filter(Publisher == 'Nintendo', Year != 'N/A')
head(nintendo_sales)
```

```
##   Rank                     Name Platform Year        Genre Publisher NA_Sales
## 1    1               Wii Sports      Wii 2006       Sports  Nintendo    41.49
## 2    2        Super Mario Bros.      NES 1985     Platform  Nintendo    29.08
## 3    3           Mario Kart Wii      Wii 2008       Racing  Nintendo    15.85
## 4    4        Wii Sports Resort      Wii 2009       Sports  Nintendo    15.75
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##   EU_Sales JP_Sales Other_Sales Global_Sales
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## 3    12.88     3.79        3.31        35.82
## 4    11.01     3.28        2.96        33.00
## 5     8.89    10.22        1.00        31.37
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```

**Summarizing Nintendo Sales**

```
by_platform <- nintendo_sales %>% group_by(Platform, Year) %>%
      summarize(NA_sales = sum(NA_Sales),
      EU_sales = sum(EU_Sales),
      JP_sales = sum(JP_Sales),
      Other_sales = sum(Other_Sales),
      Global_total_sales = sum(Global_Sales),
      game_count = n_distinct(Name)) %>% arrange(desc(Global_total_sales))
```

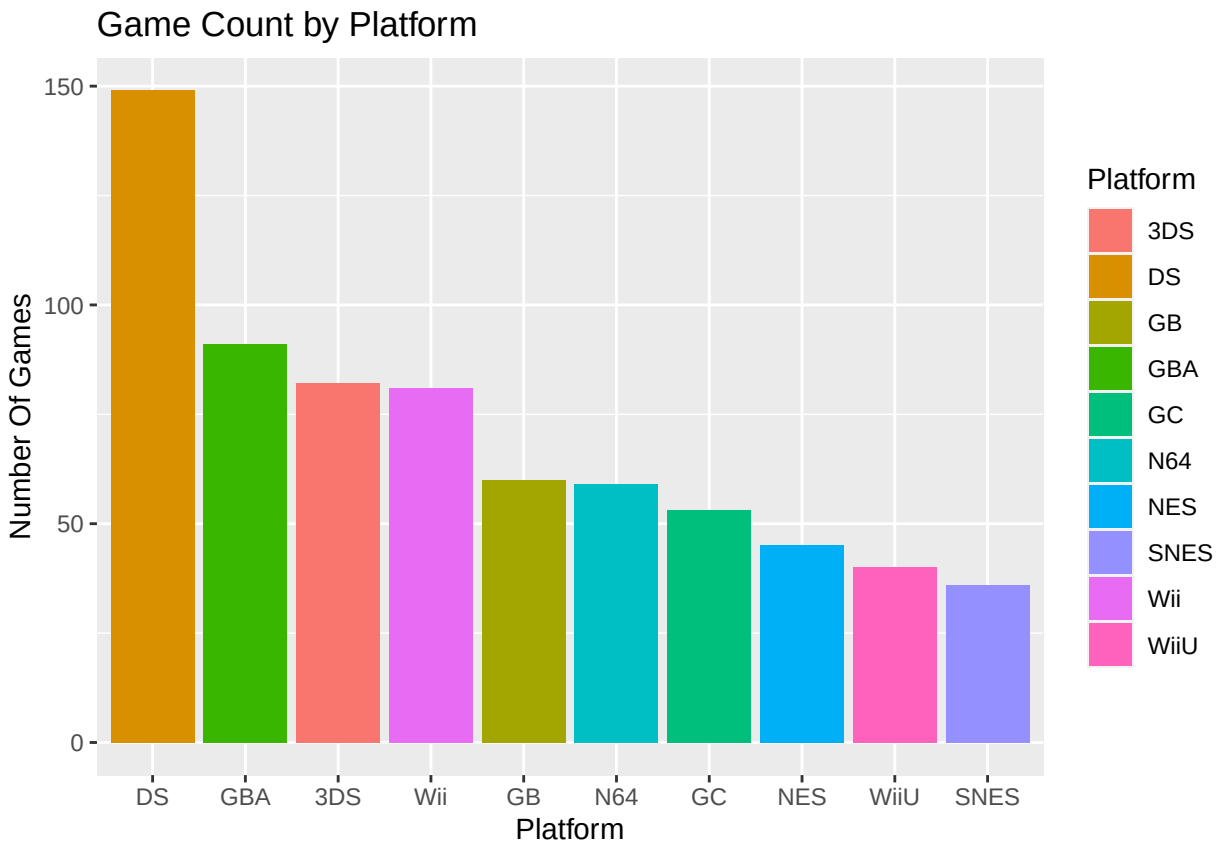
**Taking a quick look at our new summarized data frame**

```
head(by_platform)
```

```
## # A tibble: 6 x 8
## # Groups:   Platform [3]
##   Platform Year  NA_sales EU_sales JP_sales Other_sales Global_total_s~1 game_~2
##   <chr>    <chr>    <dbl>    <dbl>    <dbl>       <dbl>            <dbl>   <int>
## 1 Wii      2006      61.9     41.9     8.54       12.5             125.        9
## 2 DS       2005      36.2     39.8    26.0         9.75            112.       25
## 3 Wii      2009      43.0     28.6    13.2         7.66             92.5      16
## 4 DS       2006      27.2     18.0    26.8         5.59             77.8      36
## 5 GB       1989      39.8      7.6    15.1         1.4              63.9       9
## 6 Wii      2007      28.6     20.7     8.55        5.46             63.3      16
## # ... with abbreviated variable names 1: Global_total_sales, 2: game_count
```

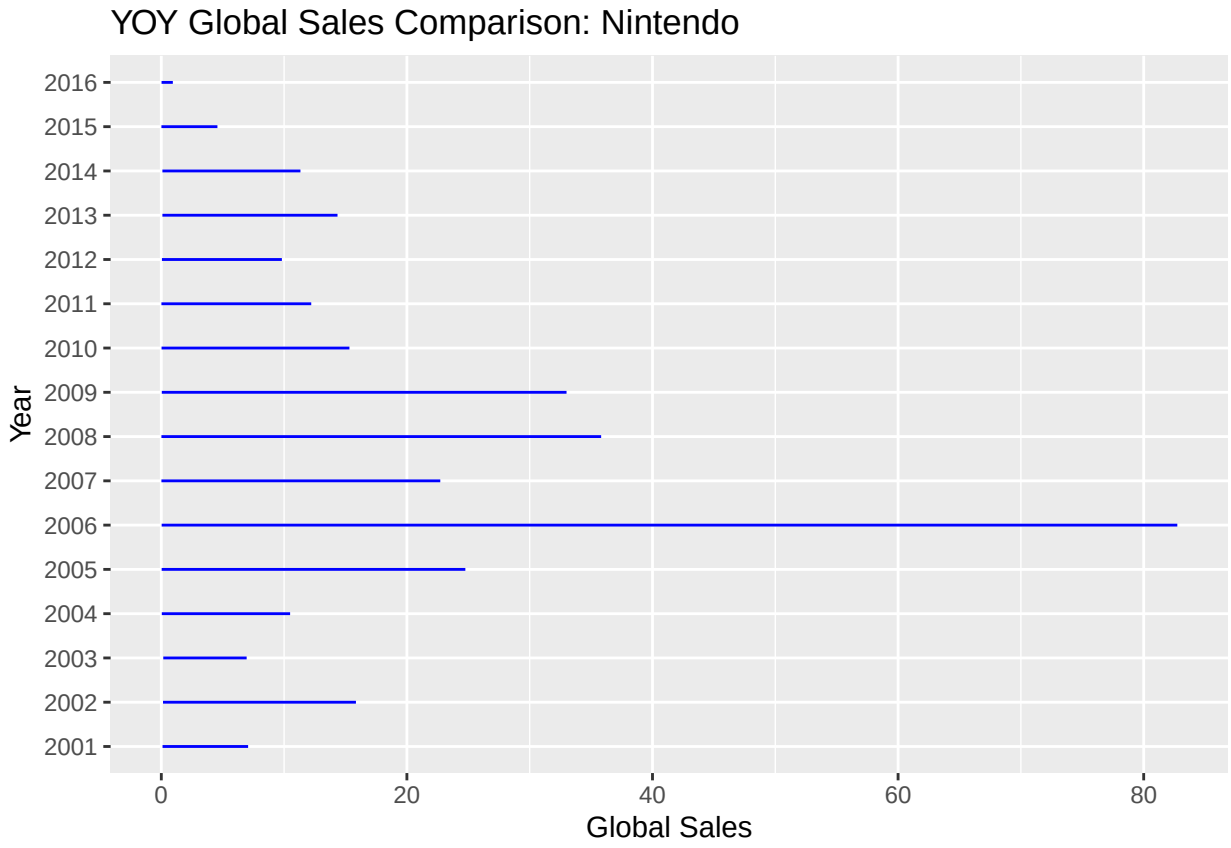
**Nintendo Games by Platform**

```
ggplot(by_platform, aes(x=reorder(Platform,-game_count,sum), y=game_count, fill = Platform))+
     geom_col() + labs(title = 'Game Count by Platform',x = 'Platform', y = "Number Of Games")
```



**Global Sales from 2000 forward**

```
sales_from_2000 <- nintendo_sales %>% filter(Year > 2000)
ggplot(sales_from_2000, mapping = aes(y = Year, x=Global_Sales)) + geom_line(color= 'blue') +labs(title
```



### Viewing year over year change of global sales

```
yoy_sales <- sales_from_2000 %>%
    group_by(Year) %>%
    summarize(total_sales = sum(Global_Sales))%>%
    mutate(change = total_sales - lag(total_sales))
glimpse(yoy_sales)
```

```
## Rows: 16
## Columns: 3
## $ Year        <chr> "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2~
## $ total_sales <dbl> 45.37, 48.31, 38.14, 60.65, 127.47, 205.61, 104.18, 91.22,~
## $ change      <dbl> NA, 2.94, -10.17, 22.51, 66.82, 78.14, -101.43, -12.96, 37~
```

### Plotting change from year to year

```
ggplot(yoy_sales, aes(x= Year, y= change, fill = change)) + geom_col()+labs(title = "YOY Sales Change: N
```

```
## Warning: Removed 1 rows containing missing values (`position_stack()`).
```