

R Notebook

Importing the libraries

Code

```
library(ggplot2)
library(plotly)
```

Attaching package: ‘plotly’

The following object is masked from ‘package:ggplot2’:

last_plot

The following object is masked from ‘package:stats’:

filter

The following object is masked from ‘package:graphics’:

layout

records creation

Hide

```
name = c("Prashanth", "Sam", "Rohan", "Daniel", "Siraj", "Dhoni", "Yuvraj", "Rohith")
age = c(20, 15, 30, 40, 30, 25, 43, 37)
weight = c(57, 69, 75, 70, 83, 53, 83, 90)
height = c(177, 163, 163, 183, 164, 190, 179, 182)
branch = c("Data Analytics", "Machine Learning Engineer", "Data Analytics", "Data Analytics", "Machine Learning Engineer",
           "Business Intelligence Engineer", "Data warehousing Engineer", "Business Intelligence Engineer")
address = c("Chennai", "Madurai", "Punjab", "Salem", "Madurai", "Punjab", "Chennai", "Salem")
score = c(80, 90, 75, 60, 80, 95, 99, 56)
```

data-frame creation

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```
df = data.frame(row.names = name, age, weight, height, branch, address, score)
head(df)
```

	age<dbl>	weight<dbl>	height<dbl>	branch<chr>	address<chr>	score<dbl>
Prashanth	20	57	177	Data Analytics	Chennai	80
Sam	15	69	163	Machine Learning Engineer	Madurai	90
Rohan	30	75	163	Data Analytics	Punjab	75
Daniel	40	70	183	Data Analytics	Salem	60
Siraj	30	83	164	Machine Learning Engineer	Madurai	80
Dhoni	25	53	190	Business Intelligence Engineer	Punjab	95

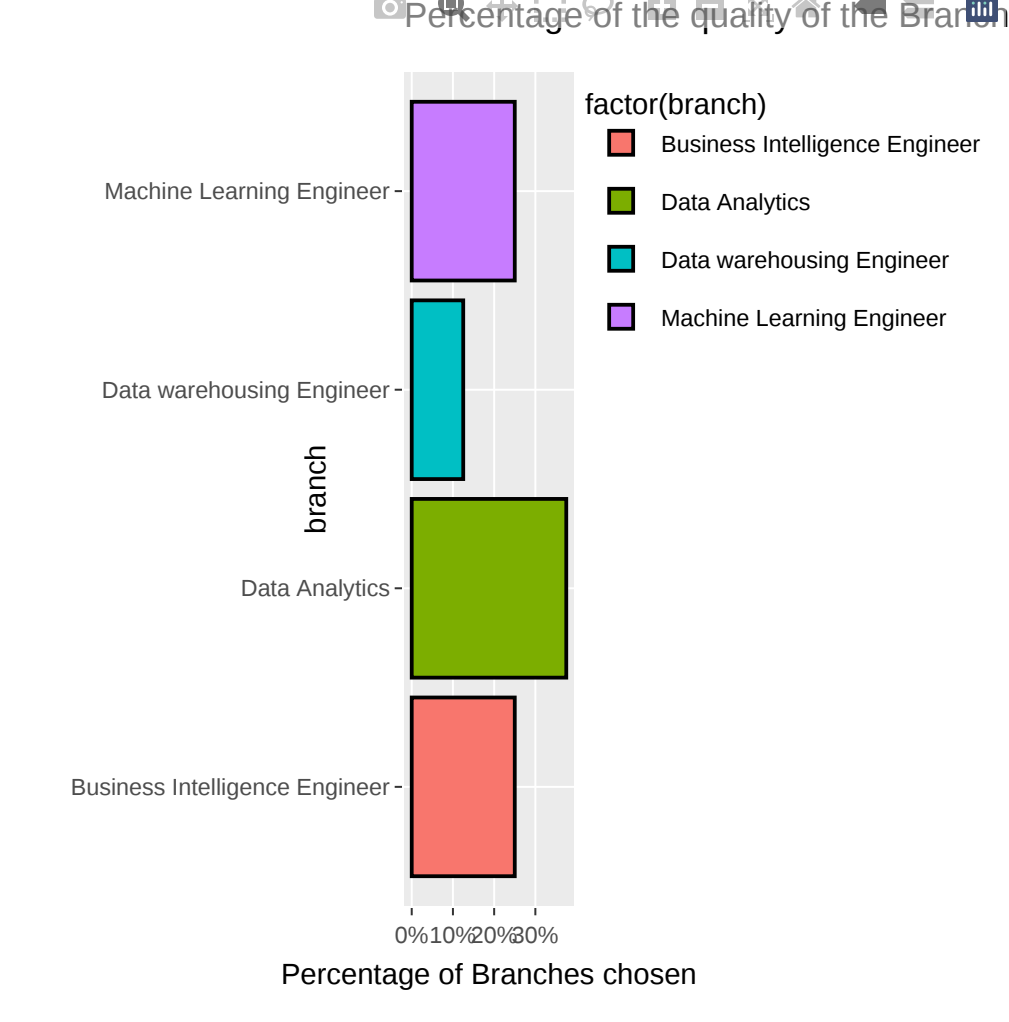
6 rows

Bar Plot

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```
bar_plot = ggplot(data=df, aes(x = branch, y = ..count.. / sum(..count..),fill = factor(branch))) +
  geom_bar(color='black') +
  labs(y = "Percentage of Branches chosen", title = "Percentage of the quality of the Branch") +
  scale_y_continuous(labels = scales::percent) +
  coord_flip()

ggplotly(bar_plot)
```



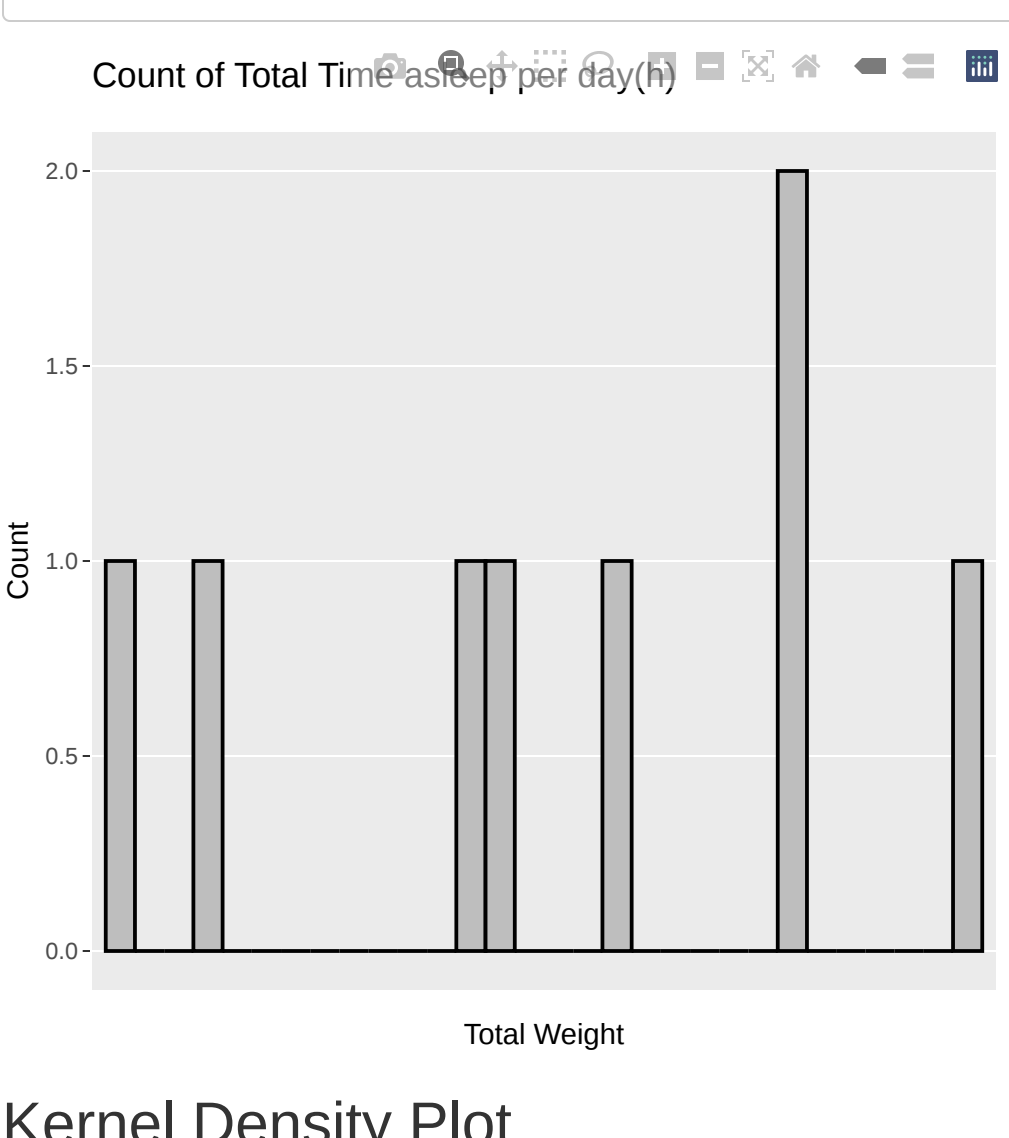
Histogram

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```
histogram_plot = ggplot(data=df, aes(x=weight)) +
  geom_histogram(color = "black", fill = "grey") +
  labs(x = "Total Weight", y="Count", title="Count of Total Time asleep per day(h)") +
  scale_x_discrete(labels =labs)

ggplotly(histogram_plot)
```

‘stat_bin()’ using ‘bins = 30’. Pick better value with ‘binwidth’.



Kernel Density Plot

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```
density_plot = ggplot(data=df, aes(x = height)) +
  geom_density(fill = "indianred3") +
  labs(x = "height", y="density", title="Kernal density of the height")

ggplotly(density_plot)
```



Scatter plot

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```
t <- list(family = "Helvetica",size = 14,color = "blue")
t1 <- list(family = "Times New Roman",color = "red")
t2 <- list(family = "Courier New",size = 14,color = "green")
t3 <- list(family = 'Arial')
```

Hide

```
fig_sp = plot_ly(data = df, x=height, y=weight, color = ~name,
                 type = 'scatter', mode = 'markers')%>%
  layout(title= list(text = "Body weight vs Brain weight",font = t1), font =t,
         legend = list(title=list(text='Animals',font = t2)),
         xaxis = list(title= list(text='Brain Weight', font = t3)),
         yaxis = list(title = list(text='Body Weight', font = t3)),
         plot_bgcolor='#e5ecf6')

fig_sp
```



Pie-Chart

Hide

```
df_order = data.frame(table(df$address))
print(df_order)
```

Var1<ctr>	Freq<int>
Chennai	2
Madurai	2
Punjab	2
Salem	2

4 rows

Hide

```
fig_order = plot_ly(type='pie', labels=df_order$Var1, values=df_order$Freq,
                    textinfo='label+percent',insidetextorientation='radial')

fig_order
```

