

Algorithm

```
library(tidyverse)
library(haven)
library(palmerpenguins)
```

Import dataset

```
PR <- read_spss("BDPR7RFL.SAV")

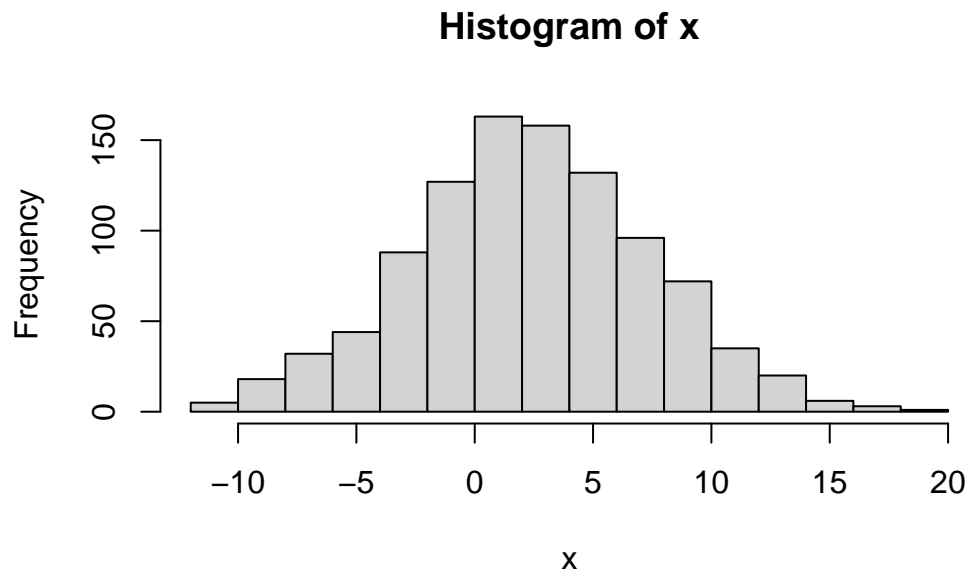
PR_df <- PR |>
  select(HV226, HV206, HV208, HV243A, HV221, HV209, HV242) |>
  rename(cooking_fuel= HV226, Electricity = HV206,
         Television = HV208, Mobile.phone = HV243A, Landline = HV221,
         Refrigerator = HV209, separate.kitchen = HV209) ## Renaming Variable

head(PR_df)
```

```
# A tibble: 6 x 7
  cooking_fuel Electricity Television Mobile.phone Landline separate.kitchen
  <dbl+lbl>    <dbl+lbl>    <dbl+lbl>    <dbl+lbl>    <dbl+lbl>    <dbl+lbl>
1 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
2 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
3 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
4 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
5 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
6 8 [Wood]      0 [No]      0 [No]      1 [Yes]      0 [No]      0 [No]
# i 1 more variable: HV242 <dbl+lbl>
```

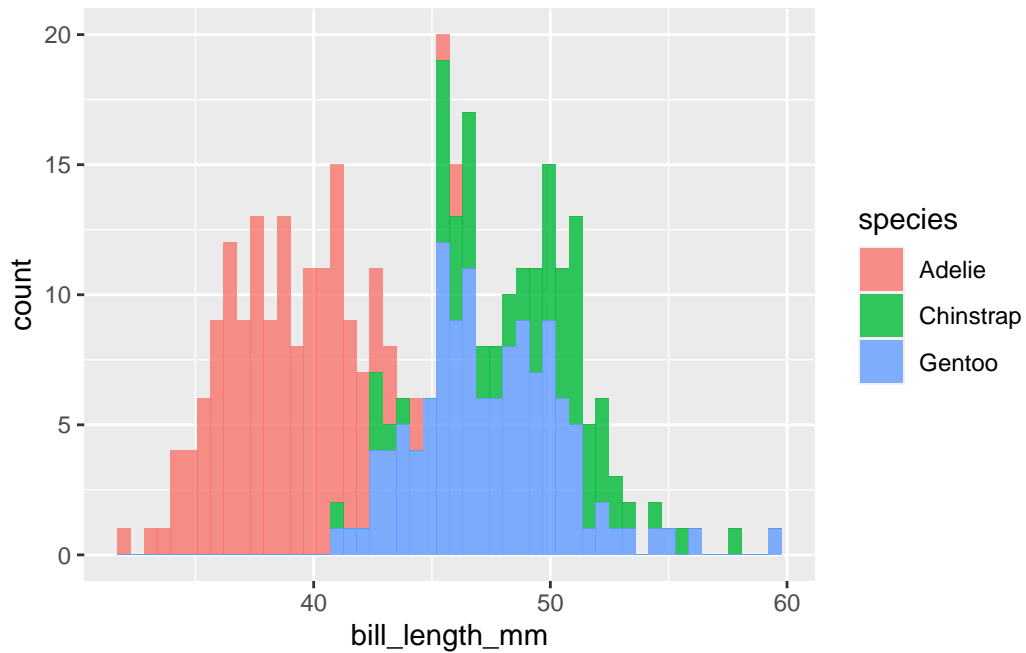
Generate data from Normal Distribution

```
x <- rnorm(1000,2,5)
hist(x)
```



```
penguins |>
  ggplot(aes(x= bill_length_mm, fill = species))+
  geom_histogram(bins = 50, alpha=0.8)
```

Warning: Removed 2 rows containing non-finite values (`stat_bin()`).



Data Cleaning

```
head(mtcars)
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.460	20.22	1	0	3	1

```
ggplot(mtcars,aes(x= disp,y=hp,col=as.factor(cyl)))+
  geom_point(alpha=0.7,size=3)+
  theme_minimal()
```

