Exercise for alpha=5

Solution

1 Exercise 1

Here is a distribution of width $\alpha = 5$ defined with `python`. Now do your stuff.

```
distribution = np.random.normal(0, alpha, 10)
print(distribution)
```

```
#>  [ 8.82026173  2.00078604  4.89368992 11.204466    9.33778995 -4.8863894
#>    4.75044209 -0.75678604 -0.51609426  2.05299251]
```

And here we define it with `R`:

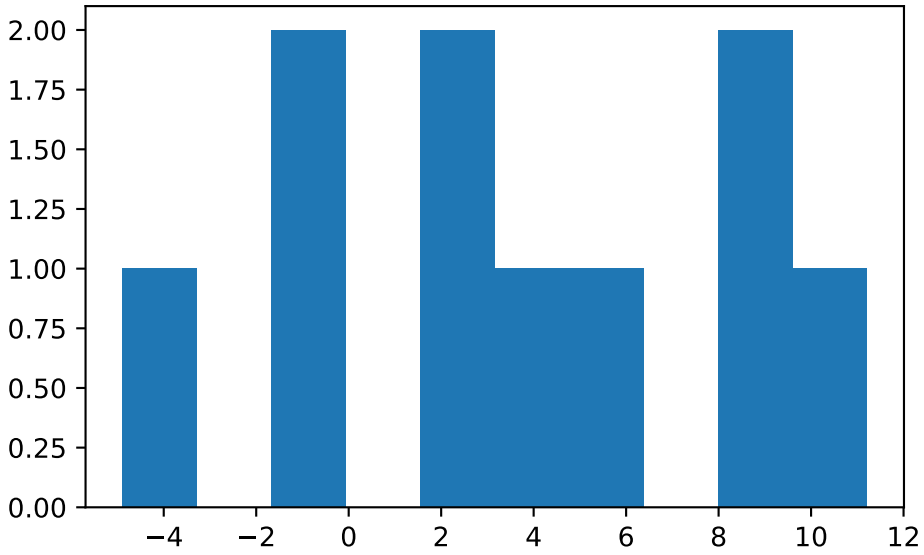
```
rdistribution <- rnorm(10, mean=0, sd=alpha)
rdistribution
```

```
#>   [1]  6.31477142 -1.63116680  6.64899631  6.36214661  2.07320717 -7.69975021
#>   [7] -4.64283517 -1.47360223 -0.02883586 12.02326694
```

1.1 Solution

Here is the solution with some maths : $\alpha = 5$, and some code and graphs:

```
plt.hist(distribution)
plt.show()
```



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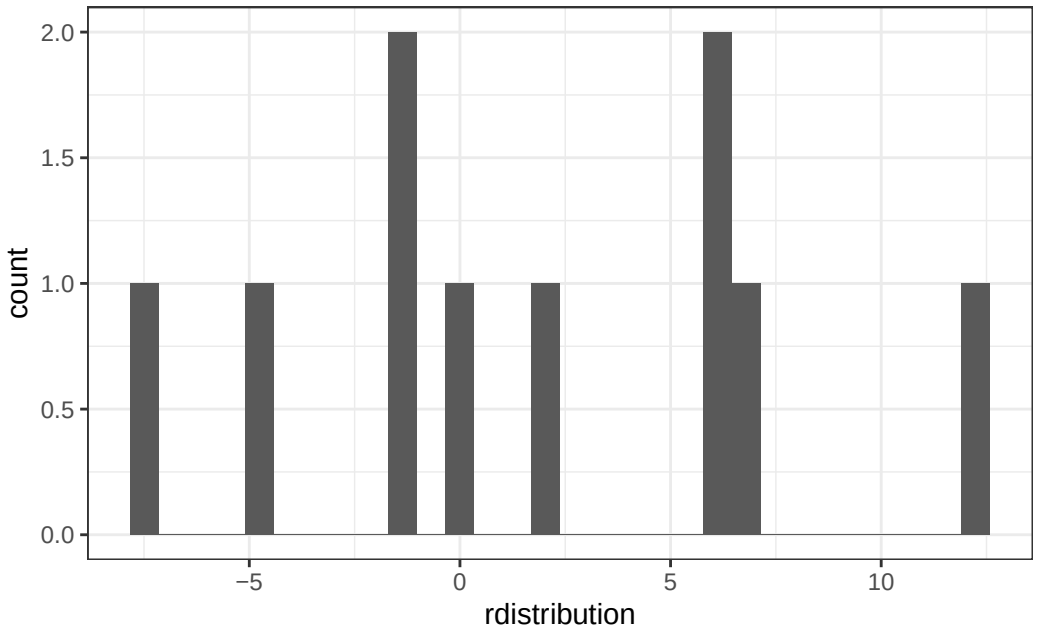
2 Exercise 2

Do some other stuff.

2.1 Solution

Here is the solution to the second exercise.

```
rdistribution %>% as_tibble() %>%
    ggplot(aes(rdistribution))+
    geom_histogram()+
    theme_bw()
```


2.0
1.5
1.0
0.5
0.0
count
−5
0
5
10
rdistribution