Exercise for alpha=1

Solution

1 Exercise 1

Here is a distribution of width $\alpha = 1$ defined with `python`. Now do your stuff.

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

```
#>  [ 1.76405235  0.40015721  0.97873798  2.2408932   1.86755799 -0.97727788
#>    0.95008842 -0.15135721 -0.10321885  0.4105985 ]
```

And here we define it with `R`:

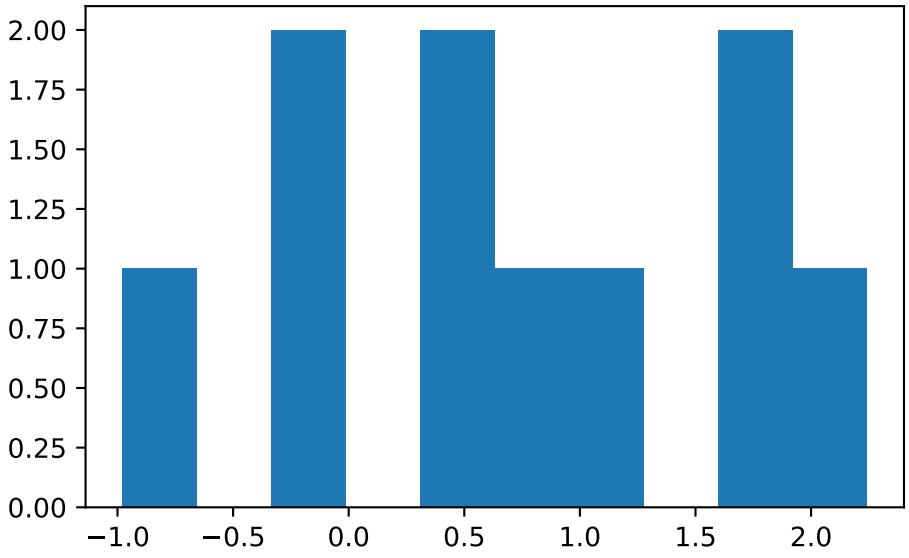
```
rdistribution <- rnorm(10, mean=0, sd=alpha)
rdistribution
```

```
#>   [1]  1.262954285 -0.326233361  1.329799263  1.272429321  0.414641434
#>   [6] -1.539950042 -0.928567035 -0.294720447 -0.005767173  2.404653389
```

1.1 Solution

Here is the solution with some maths : $\alpha = 1$, and some code and graphs:

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



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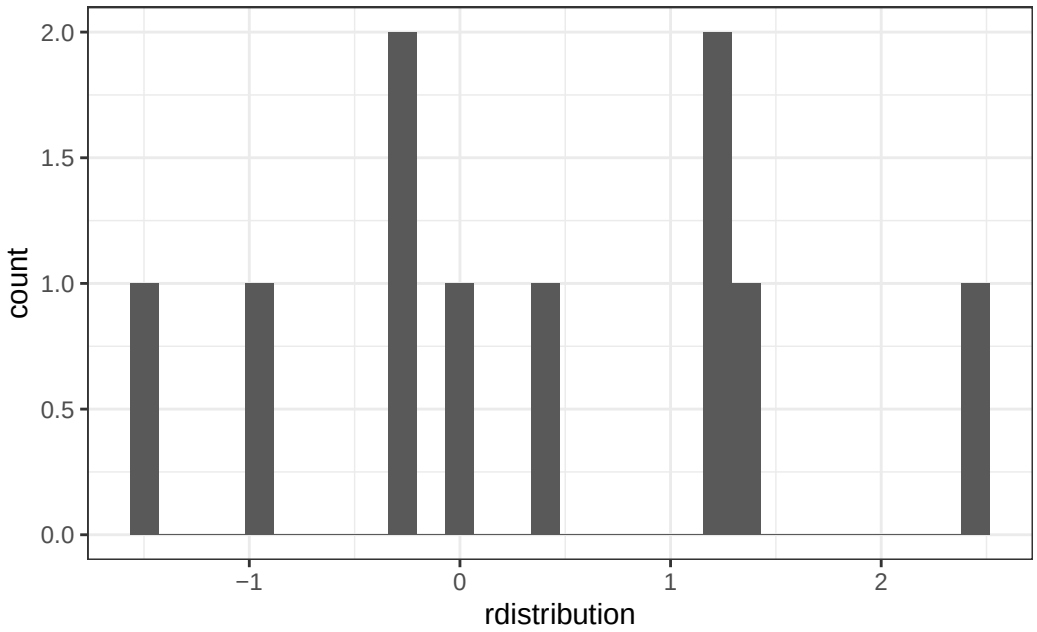
2 Exercise 2

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
−1
0
1
2
rdistribution