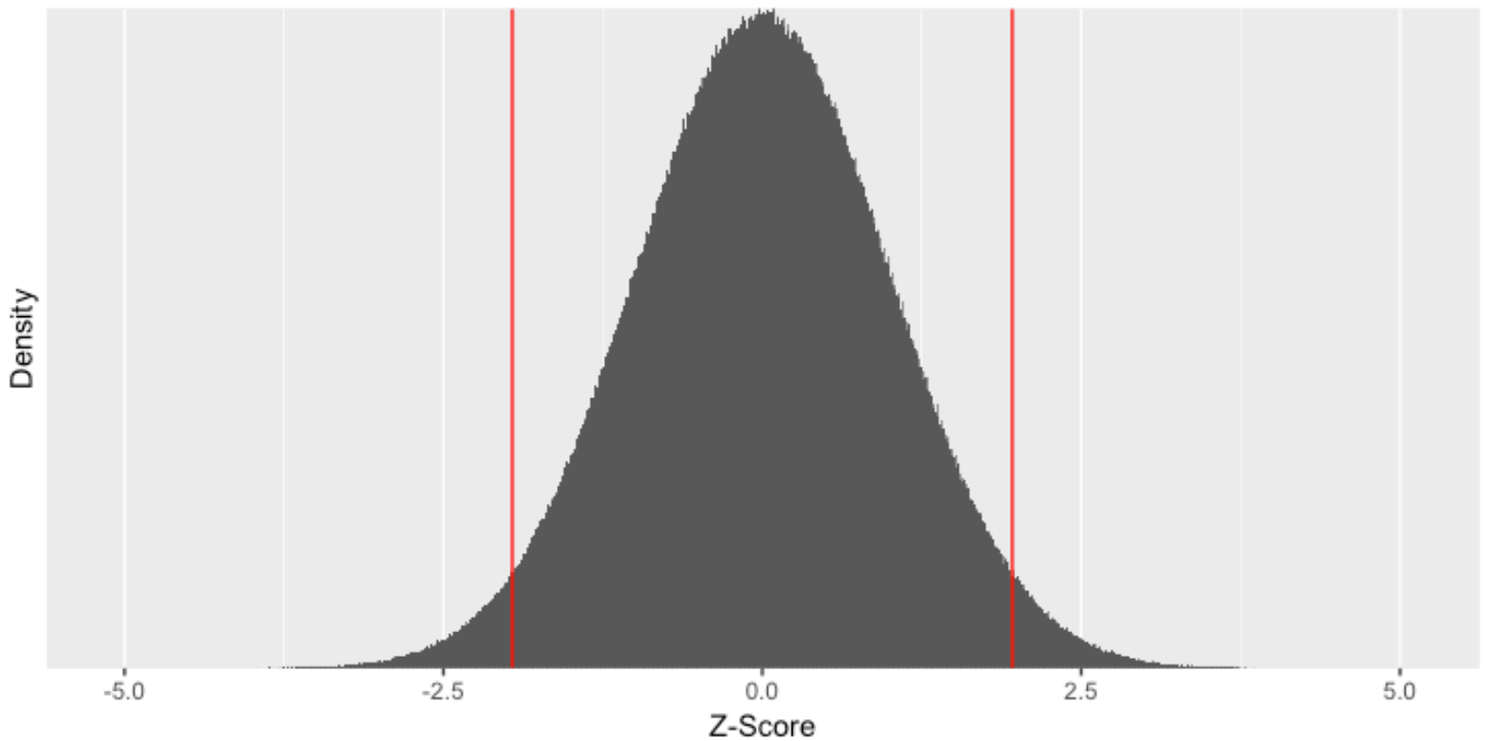
- We can use the `pnorm()` function to give us the area under the curve of the normal distribution.

- To work out the area bounded by 1.96 standard deviations from the mean in the standard normal distribution:

```
> pnorm(1.96, mean = 0, sd = 1) - pnorm(-1.96, mean = 0, sd = 1)

[1] 0.9500042
```



- We can convert any normally distributed data to the standard normal (i.e., Z) distribution by using the `scale()` function. This will centre it so the mean is 0 and scale it so that the standard deviation is 1.

```
> set.seed(1234)

> dist1 <- rnorm(50000, 1000, 50)

> hist(dist1, breaks = 100)

> hist(scale(dist1), breaks = 100)
```