

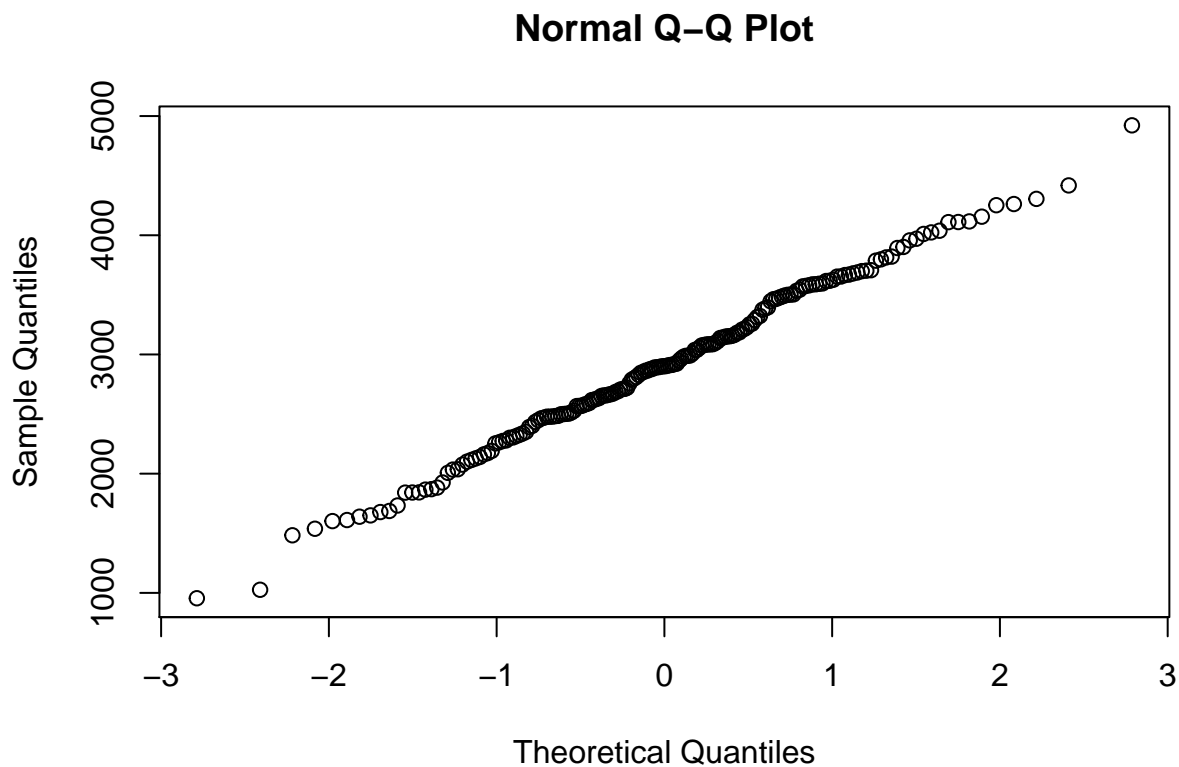
# assignment01\_group43

EDDA-Group43

2021/2/19

## Ex1

```
data = read.table(file="birthweight.txt", header=TRUE)
qqnorm(data$birthweight)
```



```
data_mean = mean(data$birthweight)
error = qt(0.95, df=length(data$birthweight)) * sd(data$birthweight) / sqrt(length(data$birthweight))
upper_bound = data_mean + error
lower_bound = data_mean - error

t.test(data$birthweight, conf.level=0.9)
```

```
##
## One Sample t-test
```

```
##
## data: data$birthweight
## t = 57.269, df = 187, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 90 percent confidence interval:
## 2829.202 2997.384
## sample estimates:
## mean of x
## 2913.293

t.test(data$birthweight, mu=2800, alternative="greater")

##
## One Sample t-test
##
## data: data$birthweight
## t = 2.2271, df = 187, p-value = 0.01357
## alternative hypothesis: true mean is greater than 2800
## 95 percent confidence interval:
## 2829.202 Inf
## sample estimates:
## mean of x
## 2913.293
```