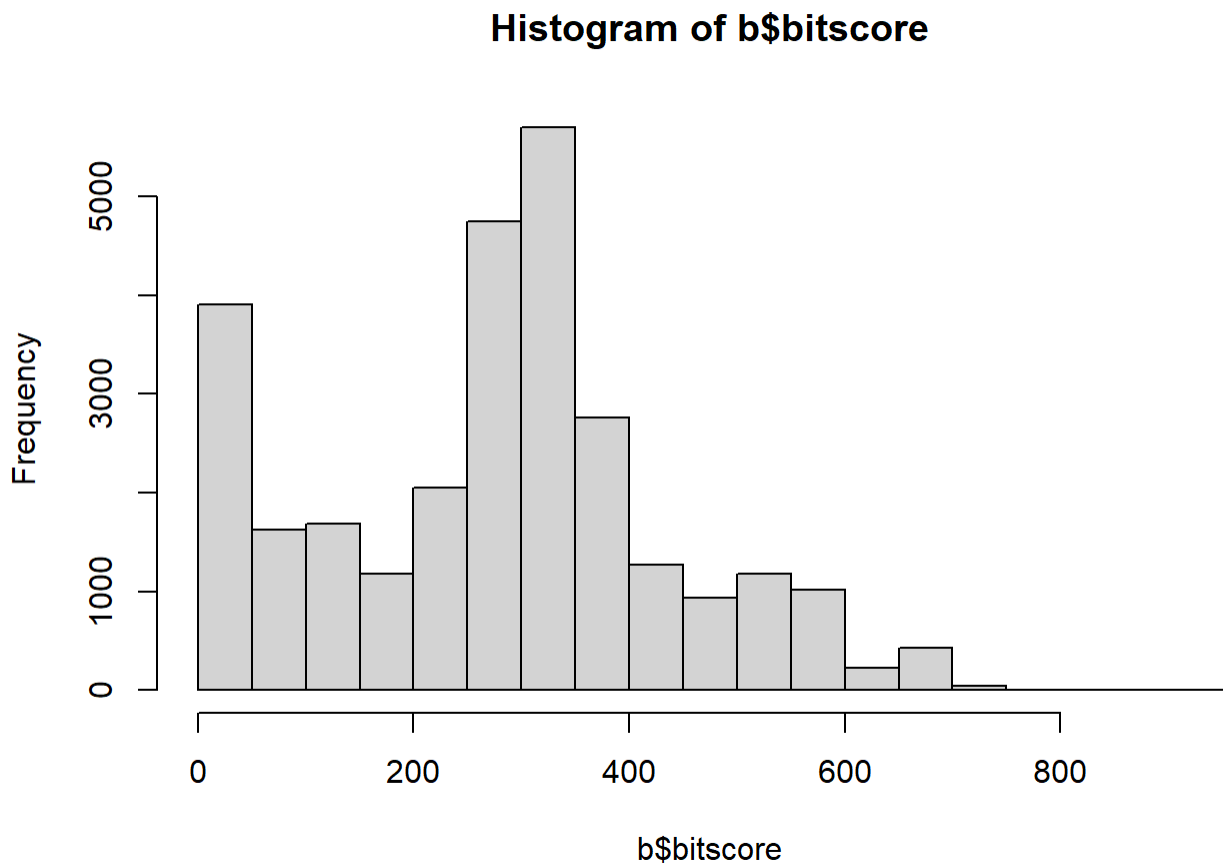# Class 17

A17576411

2023-11-28
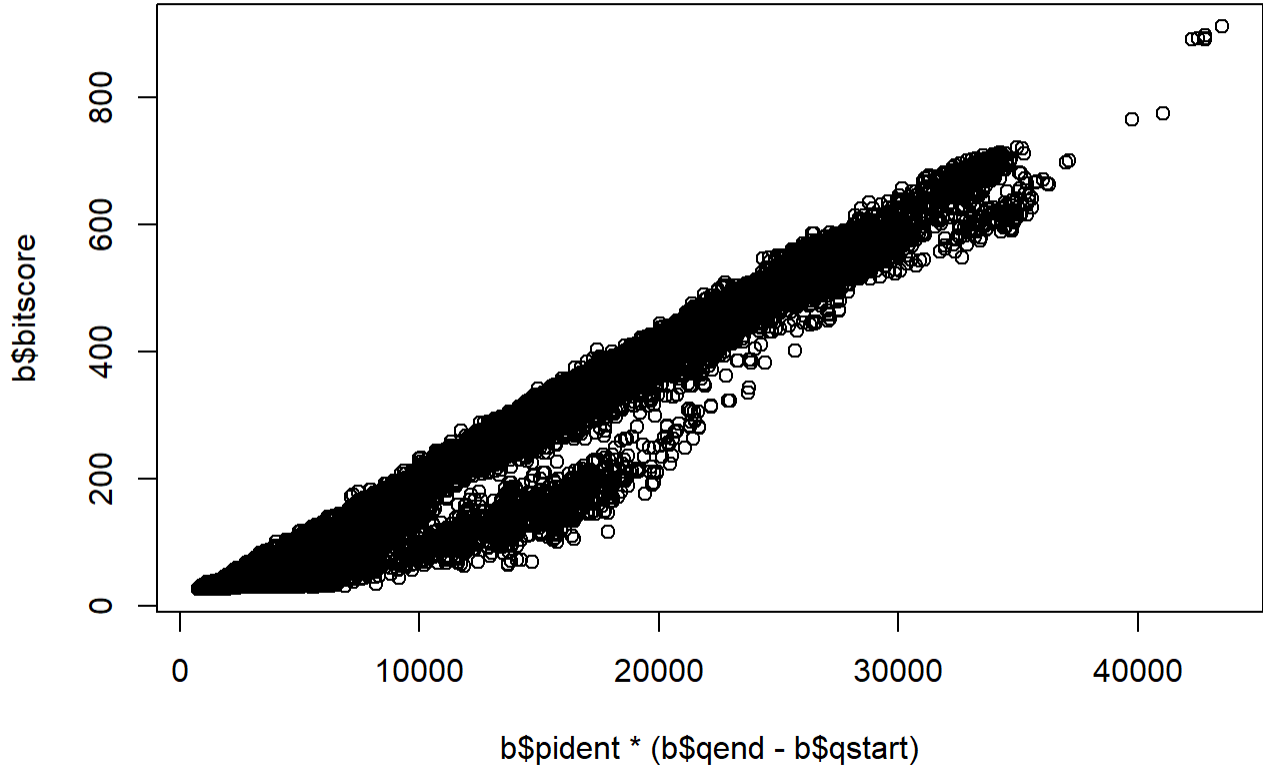
```
b <- read.table("results.tsv")
```

```
colnames(b) <- c("qseqid","sseqid","pident","length","mismatch","gapopen","qstart","qend","sstart","send","evalue","bitscore")
```
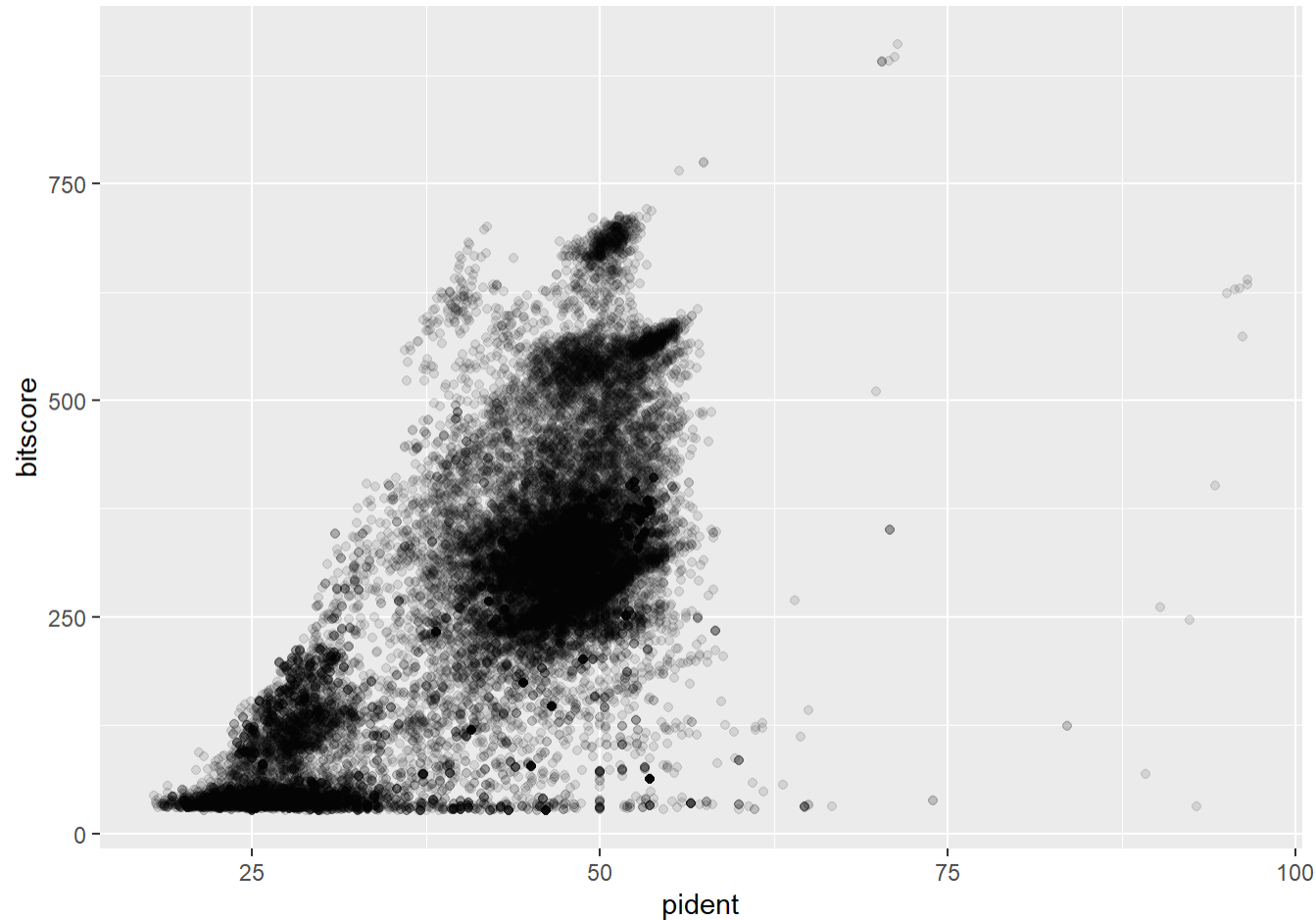
```
hist(b$bitscore, breaks=30)
```

Histogram of b$bitscore


```
## Asuming your blast results are stored in an object called 'b'
plot(b$pident  * (b$qend - b$qstart), b$bitscore)
```



```
library(ggplot2)
ggplot(b, aes(pident, bitscore)) + geom_point(alpha=0.1)
```



```
ggplot(b, aes((b$pident * (b$qend - b$qstart)), bitscore)) + geom_point(alpha=0.1) + geom_smooth()
```

```
## Warning: Use of `b$pident` is discouraged.
## ℹ Use `pident` instead.
```

```
## Warning: Use of `b$qend` is discouraged.
## ℹ Use `qend` instead.
```

```
## Warning: Use of `b$qstart` is discouraged.
## ℹ Use `qstart` instead.
```

```
## Warning: Use of `b$pident` is discouraged.
## ℹ Use `pident` instead.
```

```
## Warning: Use of `b$qend` is discouraged.
## ℹ Use `qend` instead.
```

```
## Warning: Use of `b$qstart` is discouraged.
## ℹ Use `qstart` instead.
```

```
## `geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
```