Module07, Q2

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This file was created on 2020-07-24 and last modified on 2021-07-17.

Note: this solution uses R and SQLite. An alternate solution using SAS and Oracle is also available.

Note: Some of the names used in this code are arbitrary and you can choose whatever names you want. To emphasize which names can be modified at your discretion, I am using names of famous statisticians.

The statistician being honored in this code is Hirotugu Akaike.

Q2. Compute the average pk score at baseline, the average score at one year, and the average change score. Without running any formal statistical tests, tell us whether you think the pk scores are increasing, decreasing, or staying about the same.

```
library(sqldf)
```

```
## Loading required package: gsubfn
```

```
## Loading required package: proto
```

```
## Loading required package: RSQLite
```

```
akaike <- dbConnect(SQLite(),
  dbname="../data/melange.sqlite")
hirotugu_q2 <- dbGetQuery(conn=akaike,  "
    select
      avg(b.pk1) as pk1_avg,
      avg(o.pk5) as pk5_avg,
      avg(b.pk1)-avg(o.pk5) as change_score
      from acupuncture_baseline_results as b
      join acupuncture_one_year_results as o
      on b.id=o.id
")

hirotugu_q2
```

```
##    pk1_avg  pk5_avg change_score
## 1 25.56894 19.08245     6.486489
```

```
dbDisconnect(conn=akaike)
```