FLs generate mating pairs

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```
# setwd("Documents/research/projects/Lsax_fertilisation_time/")
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
dt = read.csv("../data/FLs_size_mm_sex_after_male.csv")
# head(dt)
dt_sex = split(dt, dt$sex)
dt_sex$female = filter(dt_sex$female, size_mm > 8.5)
dt_sex$female$fgroup = c("G1", "G5", "G30")
for (f in 1:nrow(dt_sex$female)) {
  success=FALSE
  i=1
  f_log = log(dt_sex$female$size_mm[f])
  while (!success) {
    m_row = sample_n(dt_sex$male, size = 1)
    m_idx = which(dt_sex$male$snail_ID==m_row[,"snail_ID"])
    m_log = log(m_row[,"size_mm"])
    or = round(f_log - m_log, 1)
    # cat(or, "\n")
    success = (or >= 0.2 & or <= 0.4)
    i = i + 1
    if (or >= 0.2 & or <= 0.4) {
      cat("Female ID", dt_sex$female$snail_ID[f], "matched with male ID", m_row[,"snail_ID"], "in time g
          dt_sex$female$fgroup[f], "\n")
      dt_sex$male = dt_sex$male[-m_idx,]
    }
  }
}
```

```
## Female ID 612 matched with male ID 667 in time group G1
## Female ID 613 matched with male ID 649 in time group G5
## Female ID 614 matched with male ID 655 in time group G30
## Female ID 615 matched with male ID 597 in time group G1
## Female ID 616 matched with male ID 573 in time group G5
## Female ID 617 matched with male ID 571 in time group G30
## Female ID 620 matched with male ID 678 in time group G1
## Female ID 621 matched with male ID 587 in time group G5
## Female ID 622 matched with male ID 683 in time group G30
## Female ID 623 matched with male ID 668 in time group G1
```

```
## Female ID 712 matched with male ID 583 in time group G5
## Female ID 713 matched with male ID 662 in time group G30
## Female ID 714 matched with male ID 670 in time group G1
## Female ID 715 matched with male ID 669 in time group G5
## Female ID 716 matched with male ID 570 in time group G30
## Female ID 717 matched with male ID 656 in time group G1
## Female ID 718 matched with male ID 674 in time group G5
## Female ID 719 matched with male ID 673 in time group G30
## Female ID 637 matched with male ID 575 in time group G1
## Female ID 639 matched with male ID 584 in time group G5
## Female ID 641 matched with male ID 581 in time group G30
## Female ID 642 matched with male ID 672 in time group G1
## Female ID 643 matched with male ID 585 in time group G5
## Female ID 624 matched with male ID 665 in time group G30
## Female ID 625 matched with male ID 677 in time group G1
## Female ID 626 matched with male ID 654 in time group G5
## Female ID 636 matched with male ID 572 in time group G30
```