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.csv")
head(dt)
     snail_ID size_mm sex notes
## 1
          648
                   10 male
## 2
          649
                    9 male
## 3
          652
                    9 male
## 4
          653
                   10 male
## 5
          662
                    7 male
## 6
          663
                   10 male
dt_sex = split(dt, dt$sex)
for (f in 1:nrow(dt_sex$female)) {
  success=FALSE
  i=1
 f_log = log(dt_sex$female$size_mm[f])
  while (!success) {
    m_row = sample_n(dt_sex$male, size = 1, replace = FALSE)
    m_log = log(m_row[,"size_mm"])
    or = round(f_log - m_log, 1)
    # cat(or, "\n")
    success = (or \geq 0.2 & or \leq 0.4)
    i = i + 1
    if (or \geq 0.2 \& or \leq 0.4) {
      cat("Female ID", dt_sex$female$snail_ID[f], "matched with male ID", m_row[,"snail_ID"], "\n")
    }
 }
}
## Female ID 612 matched with male ID 652
## Female ID 613 matched with male ID 658
## Female ID 614 matched with male ID 597
## Female ID 615 matched with male ID 671
## Female ID 616 matched with male ID 678
## Female ID 617 matched with male ID 670
## Female ID 618 matched with male ID 674
```

```
## Female ID 619 matched with male ID 585
## Female ID 620 matched with male ID 654
## Female ID 621 matched with male ID 673
## Female ID 622 matched with male ID 678
## Female ID 623 matched with male ID 585
## Female ID 686 matched with male ID 585
## Female ID 687 matched with male ID 675
## Female ID 688 matched with male ID 574
## Female ID 689 matched with male ID 575
## Female ID 690 matched with male ID 676
## Female ID 691 matched with male ID 652
## Female ID 692 matched with male ID 660
## Female ID 693 matched with male ID 573
## Female ID 694 matched with male ID 674
## Female ID 695 matched with male ID 654
## Female ID 696 matched with male ID 674
## Female ID 697 matched with male ID 663
## Female ID 624 matched with male ID 665
## Female ID 625 matched with male ID 669
## Female ID 626 matched with male ID 675
## Female ID 627 matched with male ID 656
## Female ID 628 matched with male ID 652
## Female ID 629 matched with male ID 583
## Female ID 630 matched with male ID 675
## Female ID 631 matched with male ID 656
```