4.4-For Loops

Igor Luciano de Paula

February 16, 2018

```
In [ ]: > compute_s_n <- function(n){
        +    x <- 1:n
        +    sum(x)
        + }
        > compute_s_n(3)
        [1] 6
        > compute_s_n(100)
        [1] 5050
        > compute_s_n(2018)
        [1] 2037171
        > for (i in 1:5){
        +    print(i)
        + }
        [1] 1
        [1] 2
        [1] 3
        [1] 4
        [1] 5
        > i
        [1] 5
        > m <- 25
        > s_n <- vector(length = m)
        > for (n in 1:m){
        +    s_n[n] <- compute_s_n(n)
        + }
        > s_n
         [1]    1    3    6   10   15   21   28   36   45   55   66   78   91  105  120  136  153  171  190
        [20]  210  231  253  276  300  325
        > n <- 1:m
        > plot(n, s_n)
        + lines(n, n*(n+1)/2)
        > #plot + line
```