## Latihan - Pertemuan3

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## Latihan

## nomor 1

```
library(dslabs)
data(murders)
new_names = ifelse(nchar(murders$state) > 8, murders$abb, murders$state)
new_names
  [1] "Alabama" "Alaska"
                              "Arizona" "Arkansas" "CA"
                                                                "Colorado"
                   "Delaware" "DC"
## [7] "CT"
                                         "Florida" "Georgia"
                                                               "Hawaii"
                   "Illinois" "Indiana" "Iowa"
                                                    "Kansas"
## [13] "Idaho"
                                                                "Kentucky"
## [19] "LA"
                   "Maine"
                              "Maryland" "MA"
                                                    "Michigan" "MN"
## [25] "MS"
                   "Missouri" "Montana" "Nebraska" "Nevada"
                                                                "NH"
## [31] "NJ"
                   "NM"
                              "New York" "NC"
                                                    "ND"
                                                                "Ohio"
## [37] "Oklahoma" "Oregon"
                              "PA"
                                         "RI"
                                                    "SC"
                                                                "SD"
## [43] "TN"
                   "Texas"
                              "Utah"
                                         "Vermont" "Virginia" "WA"
                   "WI"
## [49] "WV"
                              "Wyoming"
nomor 2
sum_n = function(n) {
  return(sum(1:n))
}
hasil = sum_n(5000)
print(hasil)
## [1] 12502500
nomor 3
compute_s_n = function(n) {
  return(sum((1:n)^2))
}
```

```
hasil = compute_s_n(10)
print(hasil)
```

## [1] 385

 $\mathbf{nomor}\ \mathbf{4}$ 

```
s_n = vector("numeric", 25)

for (n in 1:25) {
    s_n[n] = compute_s_n(n)
}

s_n
```

## [1] 1 5 14 30 55 91 140 204 285 385 506 650 819 1015 1240 ## [16] 1496 1785 2109 2470 2870 3311 3795 4324 4900 5525

nomor 5

```
sapply(1:25, compute_s_n)
```

## [1] 1 5 14 30 55 91 140 204 285 385 506 650 819 1015 1240 ## [16] 1496 1785 2109 2470 2870 3311 3795 4324 4900 5525