Latihan 5

Alfain

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```
library(dslabs)
data(murders)
```

Nomor 1

```
new_names <- ifelse(nchar(murders$state)>8, murders$abb, murders$state)
```

Nomor 2

```
sum_n <- function(n){
  sum(1:n)
}

sum_n(5000)
```

```
## [1] 12502500
```

Nomor 3

```
compute_s_n <- function(n){
  x <- 1:n
  sum(x^2)
}

compute_s_n(10)
```

```
## [1] 385
```

Nomor 4

```r
compute_s_n <- function(n){
  x <- 1:n
  sum(x^2)
}

s_n <- vector("numeric", 25)

for(i in 1:25){
  s_n[i] <- compute_s_n(i)
}
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

```r
compute_s_m <- function(n){
  x <- 1:n
  sum(x^2)
}


s_m <- vector("numeric", 25)

s_m<-sapply(1:25, compute_s_m)
s_m
```

```
## [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
```