

Some created functions in R

1. Write a function that return 1 one the first element on the first line, then 1 on the first and second element on the second line. Then for all other lines, it add 1 one the next two columns. Eventually, call the function for a number of columns $n = 6$ then multiply the result by 4.

```
# a weird function
someweirdfunction <- function(n) {

  ab = numeric(n*(n-1)*2)
  for(i in (seq(1, (n*(n-1)*2), 2)-1)[2:n]){
    ab[1] <- 1
    ab[(i*n)] <- i
  }

  bc=numeric(length(ab))
  for(i in 1:length(bc)) {
    if (ab[i]!=0) {bc[(i-1):(i-ab[i])] <-rep(1,ab[i])}
    else
      bc[i]<- 0
  }

  cd <- c(1,bc[1:length(bc)-1])

  result <- matrix(cd, nrow = n, ncol=(n-1)*2, byrow=TRUE)

  return(result)
}
```

Outcome:

	1	2	3	4	5	6
1	4.00	0.00	0.00	0.00	0.00	0.00
2	4.00	4.00	0.00	0.00	0.00	0.00
3	4.00	4.00	4.00	4.00	0.00	0.00
4	4.00	4.00	4.00	4.00	4.00	4.00