

## HM05\_final

```
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

library(data.table)

##
## Attaching package: 'data.table'

## The following objects are masked from 'package:dplyr':
##
##   between, first, last

library(magrittr)

rewrite_dplyr <- function(my_data, row_s, col_s){

  calc_my_data <- function(data){
    if (is.numeric(data)){
      return(c(sum(data), mean(data), median(data)))
    } else{
      return(table(data))
    }
  }

  final_data <- my_data[row_s, col_s]
  my_data %<>% lapply(calc_my_data) %<>% list()

  list(final_data, my_data)
}

data <-
read.csv('/home/sedreh/ITM0/semester2/Statistic-R/2/bosson.csv',
sep = ";")
summary(data)

##      country      gender      aneurysm      bmi
risk
## France : 99   F: 51   Min.    : 21.00   Min.    :13.33   Min.
```

```

:0.000
## Vietnam:110 M:158 1st Qu.: 37.00 1st Qu.:19.23 1st
Qu.:1.000
## Median : 46.00 Median :22.21 Median
:1.000
## Mean : 47.57 Mean :22.76 Mean
:1.388
## 3rd Qu.: 55.00 3rd Qu.:26.37 3rd
Qu.:2.000
## Max. :102.00 Max. :36.16 Max.
:5.000

```

```

result <- rewrite_dplyr(data)
result

```

```

## [[1]]
## country gender aneurysm bmi risk
## 1 Vietnam M 21 21.094 0
## 2 Vietnam M 27 19.031 0
## 3 Vietnam M 28 20.313 0
## 4 Vietnam F 33 17.778 0
## 5 France F 34 21.604 0
## 6 Vietnam F 35 21.096 0
## 7 Vietnam F 35 17.778 0
## 8 France M 35 22.583 0
## 9 Vietnam F 37 21.914 0
## 10 France F 39 24.035 0
## 11 France F 39 24.035 0
## 12 Vietnam F 40 13.333 0
## 13 Vietnam F 43 19.477 0
## 14 France M 43 26.675 0
## 15 France M 44 21.857 0
## 16 Vietnam M 44 23.438 0
## 17 Vietnam M 44 23.875 0
## 18 Vietnam M 46 18.365 0
## 19 Vietnam M 47 22.232 0
## 20 Vietnam M 47 16.947 0
## 21 Vietnam F 47 21.094 0
## 22 France F 48 25.911 0
## 23 Vietnam M 48 20.576 0
## 24 Vietnam F 50 16.649 0
## 25 France M 51 25.763 0
## 26 Vietnam F 52 17.710 0
## 27 France M 52 24.152 0
## 28 France M 53 24.302 0
## 29 France M 53 26.990 0
## 30 Vietnam M 56 22.862 0
## 31 France M 59 24.344 0
## 32 France M 60 26.219 0
## 33 France M 61 18.685 0
## 34 France M 63 26.174 0

```

## 35	France	M	65	23.548	0
## 36	Vietnam	F	65	15.111	0
## 37	Vietnam	F	87	18.750	0
## 38	Vietnam	F	102	23.922	0
## 39	France	M	49	17.823	0
## 40	Vietnam	M	43	22.206	0
## 41	Vietnam	M	21	16.406	1
## 42	Vietnam	F	25	17.778	1
## 43	Vietnam	F	25	16.004	1
## 44	Vietnam	F	28	19.531	1
## 45	Vietnam	F	29	20.313	1
## 46	Vietnam	M	29	22.206	1
## 47	Vietnam	M	31	20.812	1
## 48	Vietnam	M	32	19.111	1
## 49	Vietnam	M	32	19.111	1
## 50	Vietnam	M	33	21.094	1
## 51	Vietnam	F	34	27.344	1
## 52	Vietnam	M	34	20.313	1
## 53	Vietnam	F	34	17.567	1
## 54	Vietnam	M	34	21.094	1
## 55	France	F	35	24.005	1
## 56	Vietnam	M	35	19.228	1
## 57	Vietnam	F	35	19.835	1
## 58	Vietnam	M	35	23.661	1
## 59	Vietnam	F	36	18.667	1
## 60	Vietnam	M	36	18.929	1
## 61	France	F	36	25.481	1
## 62	Vietnam	F	37	20.776	1
## 63	Vietnam	M	37	17.087	1
## 64	Vietnam	M	37	19.814	1
## 65	France	M	38	26.366	1
## 66	Vietnam	M	39	18.591	1
## 67	France	M	40	22.724	1
## 68	France	M	40	21.952	1
## 69	France	M	41	24.913	1
## 70	Vietnam	M	41	20.957	1
## 71	Vietnam	M	41	18.750	1
## 72	Vietnam	M	42	18.359	1
## 73	Vietnam	M	42	26.673	1
## 74	Vietnam	F	42	18.491	1
## 75	Vietnam	F	42	20.761	1
## 76	France	M	42	24.221	1
## 77	Vietnam	M	43	24.035	1
## 78	Vietnam	M	43	21.875	1
## 79	Vietnam	M	43	22.039	1
## 80	France	F	43	29.395	1
## 81	France	M	44	26.563	1
## 82	Vietnam	F	45	15.427	1
## 83	Vietnam	M	45	19.531	1
## 84	France	M	46	24.897	1

## 85	France	M	46	25.344	1
## 86	Vietnam	M	46	19.487	1
## 87	Vietnam	F	47	19.141	1
## 88	Vietnam	M	47	23.438	1
## 89	France	M	48	25.909	1
## 90	France	M	49	26.366	1
## 91	France	M	50	21.799	1
## 92	Vietnam	F	51	18.750	1
## 93	Vietnam	F	52	18.975	1
## 94	Vietnam	M	52	17.857	1
## 95	Vietnam	M	52	17.857	1
## 96	Vietnam	F	52	19.837	1
## 97	Vietnam	M	53	16.228	1
## 98	France	M	55	24.465	1
## 99	France	M	55	26.573	1
## 100	Vietnam	M	55	22.491	1
## 101	France	M	58	26.563	1
## 102	France	M	58	25.393	1
## 103	France	M	59	22.985	1
## 104	France	M	59	22.395	1
## 105	France	M	60	20.988	1
## 106	Vietnam	M	60	22.491	1
## 107	France	M	60	28.408	1
## 108	Vietnam	F	62	19.694	1
## 109	France	F	62	21.231	1
## 110	Vietnam	M	62	21.504	1
## 111	Vietnam	M	65	16.529	1
## 112	France	M	65	26.730	1
## 113	France	F	65	28.345	1
## 114	Vietnam	M	67	19.100	1
## 115	Vietnam	F	70	15.582	1
## 116	France	F	72	26.610	1
## 117	France	F	72	26.563	1
## 118	Vietnam	F	78	17.425	1
## 119	France	M	80	29.297	1
## 120	France	M	82	18.070	1
## 121	Vietnam	F	74	18.975	1
## 122	Vietnam	M	26	18.730	2
## 123	France	M	27	26.927	2
## 124	Vietnam	M	27	19.031	2
## 125	Vietnam	M	30	16.406	2
## 126	France	M	30	25.594	2
## 127	France	M	30	25.100	2
## 128	Vietnam	M	30	22.206	2
## 129	Vietnam	M	32	14.533	2
## 130	Vietnam	M	32	22.206	2
## 131	Vietnam	F	33	15.556	2
## 132	France	M	33	26.795	2
## 133	Vietnam	F	36	27.111	2
## 134	Vietnam	M	36	17.782	2

## 135	France	F	38	20.077	2
## 136	Vietnam	M	39	17.993	2
## 137	France	F	40	25.469	2
## 138	Vietnam	M	40	22.206	2
## 139	France	M	40	31.378	2
## 140	France	M	41	23.735	2
## 141	Vietnam	M	41	21.338	2
## 142	Vietnam	M	42	18.365	2
## 143	France	M	43	27.380	2
## 144	Vietnam	M	43	18.809	2
## 145	Vietnam	M	44	16.327	2
## 146	Vietnam	M	44	22.206	2
## 147	France	M	44	23.739	2
## 148	France	M	44	29.066	2
## 149	France	M	44	26.704	2
## 150	Vietnam	F	44	20.812	2
## 151	France	M	45	33.081	2
## 152	France	M	47	28.732	2
## 153	France	M	47	23.939	2
## 154	Vietnam	F	47	17.010	2
## 155	Vietnam	M	47	14.984	2
## 156	Vietnam	M	48	20.029	2
## 157	France	M	48	24.772	2
## 158	France	F	48	27.344	2
## 159	France	M	48	26.563	2
## 160	Vietnam	M	48	19.031	2
## 161	Vietnam	M	48	27.344	2
## 162	France	M	49	36.157	2
## 163	France	F	51	20.830	2
## 164	Vietnam	M	52	22.308	2
## 165	France	M	52	27.054	2
## 166	Vietnam	M	53	22.206	2
## 167	France	M	53	25.952	2
## 168	Vietnam	M	54	20.173	2
## 169	Vietnam	M	55	22.039	2
## 170	Vietnam	M	55	21.094	2
## 171	France	M	56	26.398	2
## 172	France	M	56	23.671	2
## 173	France	M	57	27.682	2
## 174	France	M	59	24.447	2
## 175	France	M	60	29.727	2
## 176	France	M	62	31.834	2
## 177	France	M	65	30.247	2
## 178	Vietnam	M	68	21.259	2
## 179	France	M	74	22.790	2
## 180	France	M	85	33.897	2
## 181	France	M	90	21.830	2
## 182	Vietnam	M	54	22.206	2
## 183	Vietnam	M	29	14.568	3
## 184	Vietnam	M	30	22.206	3

```

## 185 Vietnam      M      32 20.196      3
## 186 Vietnam      M      32 22.206      3
## 187 France       M      41 29.385      3
## 188 Vietnam      M      41 20.761      3
## 189 France       M      46 29.412      3
## 190 France       M      47 26.730      3
## 191 France       M      48 21.535      3
## 192 France       M      49 31.179      3
## 193 France       M      50 21.605      3
## 194 France       M      50 22.491      3
## 195 France       M      51 25.766      3
## 196 Vietnam      M      53 24.802      3
## 197 France       M      58 26.563      3
## 198 France       M      58 31.637      3
## 199 France       M      58 27.414      3
## 200 France       M      60 29.321      3
## 201 France       M      65 26.704      3
## 202 France       M      70 29.070      3
## 203 France       M      80 27.143      3
## 204 France       M      36 29.758      3
## 205 France       M      30 29.411      4
## 206 France       M      50 32.000      4
## 207 France       M      67 27.084      4
## 208 France       M      75 27.441      4
## 209 France       M      35 28.056      5
##
## [[2]]
## [[2]][[1]]
## [[2]][[1]]$country
## data
## France Vietnam
##      99      110
##
## [[2]][[1]]$gender
## data
##      F      M
##    51 158
##
## [[2]][[1]]$aneurysm
## [1] 9942.00000    47.56938    46.00000
##
## [[2]][[1]]$bmi
## [1] 4756.98800    22.76071    22.20600
##
## [[2]][[1]]$risk
## [1] 290.00000    1.38756    1.00000

```