# Task#5_fixed

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```r
set.seed(42)

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
```

```r
df_analysis= function(df, row_select, column_select){
  analysis = function(x){
    if (is.numeric(x)){
      return(sum(x))
    } else {
      return(summary(factor(x)))
    }
  }
  if (!is.character(column_select)){
    columns = colnames(df)[column_select]
  } else {
    columns = column_select
  }

  df = df %>%
    select(columns)
  df = df[row_select, ]

  return(list(df, lapply(df, analysis)))
}
```

```r
df = ChickWeight
result = df_analysis(df, c(1:23), c("weight", "Diet"))
result[1]
```

```
## [[1]]
##     weight Diet
## 1       42    1
## 2       51    1
## 3       59    1
## 4       64    1
## 5       76    1
## 6       93    1
## 7      106    1
```

```
## 8      125    1
## 9      149    1
## 10     171    1
## 11     199    1
## 12     205    1
## 13      40    1
## 14      49    1
## 15      58    1
## 16      72    1
## 17      84    1
## 18     103    1
## 19     122    1
## 20     138    1
## 21     162    1
## 22     187    1
## 23     209    1
```

```
result[2]
```

```
## [[1]]
## [[1]]$weight
## [1] 2564
##
## [[1]]$Diet
##  1
## 23
```

```
df = chickwts
result = df_analysis(df, c(T,F), c("weight", "feed"))
result[1]
```

```
## [[1]]
##    weight      feed
## 1     179 horsebean
## 3     136 horsebean
## 5     217 horsebean
## 7     108 horsebean
## 9     143 horsebean
## 11    309   linseed
## 13    181   linseed
## 15    260   linseed
## 17    148   linseed
## 19    213   linseed
## 21    244   linseed
## 23    243   soybean
## 25    248   soybean
## 27    329   soybean
## 29    193   soybean
## 31    316   soybean
## 33    199   soybean
## 35    158   soybean
## 37    423 sunflower
## 39    392 sunflower
## 41    341 sunflower
## 43    320 sunflower
## 45    334 sunflower
```

```
## 47      297  sunflower
## 49      325  meatmeal
## 51      303  meatmeal
## 53      380  meatmeal
## 55      263  meatmeal
## 57      206  meatmeal
## 59      258  meatmeal
## 61      390    casein
## 63      260    casein
## 65      318    casein
## 67      359    casein
## 69      222    casein
## 71      332    casein
```

```
result[2]
```

```
## [[1]]
## [[1]]$weight
## [1] 9547
##
## [[1]]$feed
##    casein horsebean   linseed  meatmeal   soybean sunflower
##         6         5         6         6         7         6
```