Assignment 1

2023-04-08

Task1

Task1.a

The dimension of the sample data is 40000x56, 40000 rows and 56 columns The following are categorical ordinal data with numerical values to represent order: The Affect columns which start with "aff" are all numerical discrete data that ranges from 1 to 5 to show very slightly to extremely, likelihood ("PLRAC and PLRAE") is similar with a range of 1 to 8, Societal Discontent ("disc") with a range of -2 to 2, Job insecurity ("jbInsec") with a range of -2 to 2, Employment status ("emplostatus") are split into multiple different categories each representing a range of hours worked, Perceived financial status ("PFS") with a range of -2 to 2, Disempowerment ("fail") with a range of -2 to 2, Lift satisfaction is split into three ("happy, lifeSat, MLQ) which ranges from 1 to 10, 1 to 6 and -3 to 3 respectively, Corona Community Injunctive ("c19Norm" and "c19") ranging from value of -3 to 3 and 1 to 6, Trust in Government ("trustGov") ranging from 1 to 5

Next up are the numerical values that represent

```
setwd("D:/Desktop/R files/3152 Files")
set.seed(32210213)
cvbase = read.csv("PsyCoronaBaselineExtract.csv")
cvbase <- cvbase[sample(nrow(cvbase), 40000), ] # 40000 rows
# getting the dimension
dim(cvbase)</pre>
```

[1] 40000 54

checking how many columns are numerical attributes and how many are categorical head(cvbase)

```
##
          affAnx affBor affCalm affContent affDepr affEnerg affExc affNerv affExh
## 19230
                1
                        5
                                  4
                                               1
                                                        1
                                                                   3
                                                                           2
                                                                                     1
                                                                                             1
                        2
                                                                   2
## 53371
                2
                                  4
                                               1
                                                        1
                                                                           1
                                                                                     1
                                                                                             1
## 60208
                3
                        2
                                  2
                                               3
                                                        3
                                                                   4
                                                                           2
                                                                                     2
                                                                                             1
                2
                        2
                                  3
                                               3
                                                        1
                                                                   2
                                                                           3
                                                                                     3
## 44965
                                                                                             1
                                               2
## 27626
                3
                        4
                                  2
                                                        2
                                                                   1
                                                                                     4
                                                                                             2
                                                                           1
## 48419
                4
                        1
                                  3
                                               3
                                                        2
                                                                   1
                                                                                             1
          affInsp affRel PLRAC19 PLRAEco disc01 disc02 disc03 jbInsec01 jbInsec02
##
## 19230
                          4
                                   2
                                                                                NA
                 1
                                            1
                                                                     1
                                                                                            NA
## 53371
                         3
                                   2
                                            3
                 3
                                                     1
                                                             1
                                                                    -1
                                                                                -1
                                                                                             1
## 60208
                 3
                          4
                                   3
                                             2
                                                     1
                                                                    -1
                                                                                -1
                                                                                             1
                         3
                                                                                            0
## 44965
                 3
                                   1
                                            5
                                                     1
                                                             1
                                                                     0
                                                                                -1
## 27626
                 1
                          2
                                   4
                                            7
                                                     1
                                                                                NA
                                                                                            NA
                                                             1
                                                                    -1
                 2
                          3
                                                    2
## 48419
                                            5
                                                             2
                                                                    -1
                                                                                 1
                                                                                            -1
```

```
jbInsec03 jbInsec04 employstatus_1 employstatus_2 employstatus_3
## 19230
                NA
                           NA
                                           NA
                                                           NA
                                                                           NA
## 53371
                 0
                           -2
                                           NA
                                                                           NA
                                                           1
## 60208
                  0
                           -1
                                           NA
                                                           NA
                                                                            1
## 44965
                 -1
                           -2
                                           NA
                                                           NA
                                                                           NA
## 27626
                  2
                           NA
                                           NA
                                                           NA
                                                                           NA
## 48419
                            1
                                                           NA
         employstatus_4 employstatus_5 employstatus_6 employstatus_7
## 19230
                      NA
                                      NA
                                                      NA
## 53371
                      NA
                                      NA
                                                      NA
                                                                      NA
## 60208
                      NA
                                      NA
                                                      NA
                                                                      NA
## 44965
                      NA
                                      NA
                                                      NA
                                                                      1
## 27626
                       1
                                      NA
                                                      NA
                                                                      NA
## 48419
                                      NA
                      NA
                                                      NA
                                                                      NA
         employstatus_8 employstatus_9 employstatus_10 PFS01 PFS02 PFS03 fail01
## 19230
                      NA
                                      NA
                                                       NA
                                                             -2
                                                                     0
                                                                          -2
## 53371
                      NA
                                      NA
                                                       NA
                                                             -2
                                                                    -1
                                                                          -2
                                                                                 -1
## 60208
                                      NA
                                                       NA
                                                              2
                      NA
                                                                           1
                                                                                 -1
## 44965
                      NA
                                      NA
                                                       NA
                                                              0
                                                                     1
                                                                                 -1
                                                                          -1
## 27626
                      NA
                                      NA
                                                       NA
                                                                     2
                                                                                  0
                                                              1
                                                                           0
## 48419
                      NA
                                      NA
                                                       NA
                                                             -2
                                                                     0
                                                                          -2
         fail02 fail03 happy lifeSat MLQ c19NormShould c19NormDo c19IsStrict
                     -1
                                         3
                                                        3
                                                                 -2
## 19230
             -1
                            5
                                     5
## 53371
             -1
                      0
                            8
                                     5
                                         1
                                                       -1
                                                                   1
                                        1
## 60208
                            6
                                     3
                                                        2
                                                                  1
                                                                               3
             -1
                     -1
## 44965
             -1
                      0
                            7
                                     4
                                       2
                                                        3
                                                                   3
                                                                               5
## 27626
             -1
                      1
                            3
                                     2 -2
                                                        3
                                                                   3
                                                                               6
              0
                      1
                            5
                                         3
                                                        1
         c19IsPunish c19IsOrg trustGovCtry trustGovState gender age edu
## 19230
                    4
                             2
                                          NA
                                                         NA
                                                                 1
                                                                      1
                                                          2
## 53371
                    4
                             2
                                           3
                                                                 2
                                                                      2
                                                                          4
## 60208
                   4
                             2
                                           3
                                                          2
                                                                 2
                                                                      2
                                                                          5
## 44965
                   3
                             4
                                           5
                                                          5
                                                                 2
                                                                      7
                                                                          5
                    6
## 27626
                             4
                                           2
                                                          3
                                                                  1
                             2
                   5
                                                          3
## 48419
                                           1
                                                                 1
                     coded_country c19ProSo01 c19ProSo02 c19ProSo03 c19ProSo04
##
## 19230
                           Germany
                                             2
                                                         1
                                                                     1
## 53371
                            Russia
                                             1
                                                         1
                                                                    -1
                                                                                0
## 60208
                                             2
                            Turkey
                                                         1
                                                                     1
                                                                                1
## 44965
                                             2
                                                         3
                                                                    1
                                                                                0
                       South Korea
## 27626 United States of America
                                             1
                                                         0
                                                                     1
                                                                                1
## 48419
                                                         0
                            Poland
                                             1
                                                                                1
max(na.omit(cvbase[,"trustGovCtry"]))
```

```
min(na.omit(cvbase[,"trustGovCtry"]))
```

[1] 1

[1] 5