STAT-Assignment-4.R

saiup

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dep <- matrix(c(9.95,24.45,31.75,35,25.02,16.86,14.38,9.60,24.35,27.5,17.08,37,41.95,11.66,21.65,17.89,69,10.3,34.93,46.59,44.88,54.12,56.63,22.13,21.15),25,1)  
dep

## [,1]  
## [1,] 9.95  
## [2,] 24.45  
## [3,] 31.75  
## [4,] 35.00  
## [5,] 25.02  
## [6,] 16.86  
## [7,] 14.38  
## [8,] 9.60  
## [9,] 24.35  
## [10,] 27.50  
## [11,] 17.08  
## [12,] 37.00  
## [13,] 41.95  
## [14,] 11.66  
## [15,] 21.65  
## [16,] 17.89  
## [17,] 69.00  
## [18,] 10.30  
## [19,] 34.93  
## [20,] 46.59  
## [21,] 44.88  
## [22,] 54.12  
## [23,] 56.63  
## [24,] 22.13  
## [25,] 21.15

inde <- matrix(c(rep(1,25),2,8,11,10,8,4,2,2,9,8,4,11,12,2,4,4,20,1,10,15,15,16,17,6,5,50,110,120,550,295,200,375,52,100,300,412,400,500,360,205,400,600,585,540,250,290,510,590,100,400),25,3)  
inde

## [,1] [,2] [,3]  
## [1,] 1 2 50  
## [2,] 1 8 110  
## [3,] 1 11 120  
## [4,] 1 10 550  
## [5,] 1 8 295  
## [6,] 1 4 200  
## [7,] 1 2 375  
## [8,] 1 2 52  
## [9,] 1 9 100  
## [10,] 1 8 300  
## [11,] 1 4 412  
## [12,] 1 11 400  
## [13,] 1 12 500  
## [14,] 1 2 360  
## [15,] 1 4 205  
## [16,] 1 4 400  
## [17,] 1 20 600  
## [18,] 1 1 585  
## [19,] 1 10 540  
## [20,] 1 15 250  
## [21,] 1 15 290  
## [22,] 1 16 510  
## [23,] 1 17 590  
## [24,] 1 6 100  
## [25,] 1 5 400

beta\_coefficient<-solve(t(inde)%\*%inde)%\*%t(inde)%\*%dep  
  
beta\_coefficient

## [,1]  
## [1,] 2.26379143  
## [2,] 2.74426964  
## [3,] 0.01252781