2020/12/11(五), 109 學年第一學期 資料科學應用 R 期中

學號: A107260010　　姓名: 陳舒汶

(請依照規定)貼上執行程式碼及執行結果。
詳見: R 程式作業繳交方式
http://www.hmwu.idv.tw/web/teaching/doc/R-how-homework.pdf

#exl1

```
a <- matrix(0, nrow = 25 ,ncol = 5)
#i <- Comp.hr(8:12)
# j <-Eng.hr(13:17)
for(i in 8:12){
   for(j in 13:17){
      Tuition <- j*400+i*600
      U <- i*(0.5)*j*(0.5)
      Fit <- ifelse(Tuition <= 12000,"*"," ")
      o <- cat(j,i,Tuition,U,Fit,"\n")
      for (s in 1:25){
         a[o,] <- s
      }
   }
}

rownames(a) <- c(1:25)
colnames(a) <- c("Eng.hr", "Comp.hr", "Tuition", "U", "Fit")
a



#exl2(a)
library(readxl)

Rscore <- read_excel("score-109.xlsx", skip = 1)
head(Rscore, 5)
tail(Rscore, 5)

#exl2(b)
```

```
set.seed(12345)
ID <- paste("No.", 1:75, sep="")
score.calculus <- sample(0:100, 75, replace=T)
score.english <- sample(0:100, 75, replace=T)

mydata[is.na(mydata)] <- 0
score <- which(mydata[,2] < 60 & mydata[,3] < 60,)
mydata[score,]

# ex2(c)
x1 <- sum(mydata[,2])/75
y1 <- sum(mydata[,3])/75
my.cor <-for(i in 1:75){
   a1 <- (mydata[i,2] - x1)*(mydata[i,3] - y1)
   a2 <- (mydata[i,2] - x1)*2*0.5
   a3 <- (mydata[i,3] - y1)*2*0.5
   a <- r1/(r2*r3)
   list(a)
}


# ex2(d)
cor(mydata[,2:3])


#ex3
dnorm(x, mean=0, sd=1)
```