1.

insurance.data=CDI[,c(8,5,16,17)]

2.

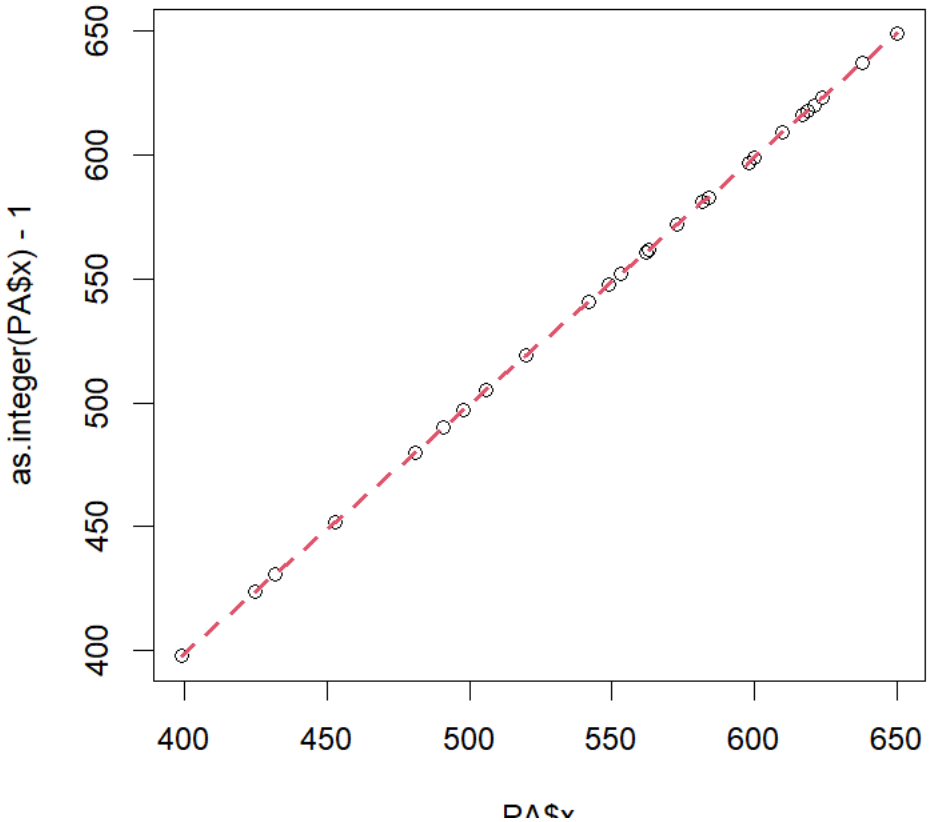
```
> setwd("C:\\Users\\ASUS\\Desktop\\回歸分析\\期末加分考\\data")
> KF=read.csv("Kidney_Function_Data.csv",header = F)
> colnames(KF)=c( "Y",paste0("x", 1:3))
> library(ALSM)
> data=KF[1:33, 2:4]
> dim(data)
[1] 33  3
> round(model.s(KF[,2:4], KF[,1]))
   p 1 2 3   SSEp r2 r2.adj   Cp AICp SBCp PRESSp
1 2 1 0 0 11068   1       1   42  196  199  12403
1 2 0 1 0 17170   0       0   82  210  213  19676
1 2 0 0 1 27287   0       0 147  226  229  30198
2 3 1 1 0  7666   1       1   22  186  190   9349
2 3 1 0 1  8713   1       1   29  190  195  10326
2 3 0 1 1 12393   1       1   53  202  206  14864
3 4 1 1 1  4500   1       1    4  170  176   5964
> A=round(model.s(KF[,2:4], KF[,1]))
> as.data.frame(A)
       p 1 2 3   SSEp r2 r2.adj   Cp AICp SBCp PRESSp
X1     2 1 0 0 11068   1       1   42  196  199  12403
X1.1 2 0 1 0 17170   0       0   82  210  213  19676
X1.2 2 0 0 1 27287   0       0 147  226  229  30198
X2     3 1 1 0  7666   1       1   22  186  190   9349
X2.1 3 1 0 1  8713   1       1   29  190  195  10326
X2.2 3 0 1 1 12393   1       1   53  202  206  14864
X3     4 1 1 1  4500   1       1    4  170  176   5964
> A[c(7,4,5),10]
  3   2   2
176 190 195
```

3.(a)

```
> PA=read.csv("Performance_Ability_Data.csv")
> colnames(PA) <- c("y", "x")
```

```
> PA$y <- factor(PA$y) ##變成 factor
> # fot Logistic Regression (generalized linear model)##"binomial"
> Task.glm <- glm(y ~ x,
+                 data = PA, family = "binomial")
> Task.glm$coefficients
(Intercept)           x
-9.67162982  0.01784907
```

(b)



(c)

```
> Task.glm$coefficients[1]
(Intercept)
     -9.67163
> exp(Task.glm$coefficients[2])
       x
1.018009
```

(d)

```
> new.X <- data.frame(x = c(50))
> predicted.Y <- predict(Task.glm,new.X , type="response")
```

```
> predicted.Y
                1
0.0001538812
```