Assignment 3

Date:19/06/2020

Question: Choose any 2 domains, pickup any classification and put them in to linear equation?

1. Retirement return (High, Medium, Low)

Retirement annuity return depends on a number of factors like:

- a. Current Age/ Start Age
- b. Lumpsum (LS)
- c. Monthly Contribution (MC)
- d. Retirement Age
- e. Monthly contribution increases annually (CG)
- f. Risk Strategy (RS)
- g. CPI
- h. Investment period = Retirement Age Current Age (P)

$$_{a1}$$
 LS + $_{a2}$ MC + $_{a3}$ CG + $_{a4}$ RS + $_{a5}$ CPI + $_{a6}$ P = High $_{b1}$ LS + $_{b2}$ MC + $_{b3}$ CG + $_{b4}$ RS + $_{b5}$ CPI + $_{b6}$ P = Medium $_{c1}$ LS + $_{c2}$ MC + $_{c3}$ CG + $_{c4}$ RS + $_{c5}$ CPI + $_{c6}$ P = Low

2. Car insurance risk calculation (High, Medium, Low)

Car insurance risk depends on the following factors:

- a. The Car you drive (CAR): If the car you drive is regularly targeted by criminals then more risk.
- b. Demographics (D): Risk calculation model also depends on your gender, age, marital status.
- c. Regular Driver (RD): If there will be one or two drivers then less risk than multiple driver
- d. Driver Claim History(C): there will be more risk if the driver has recent claims

$$_{a1}$$
 CAR + $_{a2}$ D + $_{a3}$ RD + $_{a4}$ C = High
 $_{b1}$ CAR + $_{b2}$ D + $_{b3}$ RD + $_{b4}$ C = Medium
 $_{c1}$ CAR + $_{c2}$ D + $_{c3}$ RD + $_{c4}$ C = Low

$$\begin{pmatrix}
a1 & a2 & a3 & a4 \\
b1 & b2 & b3 & b4 \\
c1 & c2 & c3 & c4
\end{pmatrix}$$

$$\begin{pmatrix}
CAR \\
D \\
RD \\
C
\end{pmatrix}$$

$$=
\begin{pmatrix}
High \\
Medium \\
Low
\end{pmatrix}$$