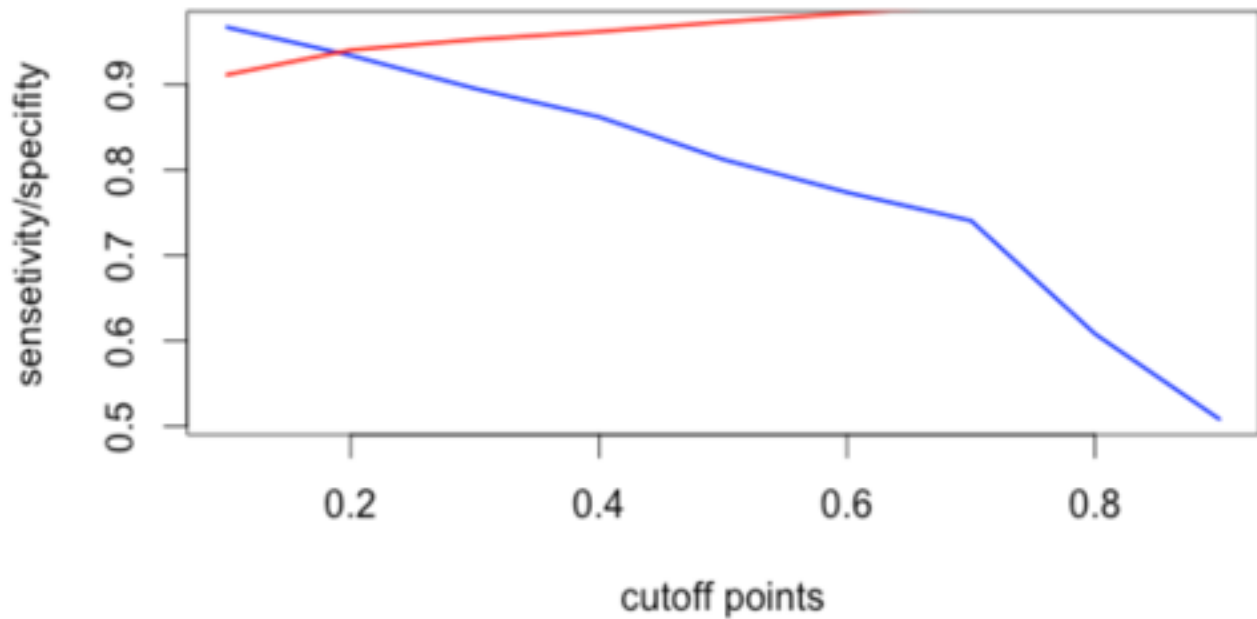


Tuo Hou//50142108

part 1:



best cut off = 0.2

predict1	0	1
0	411	7
1	25	57

sensitivity = $411 / (411 + 25) = 0.94266055$

specificity = $75 / (75 + 16) = 0.82417582$

part 2:

RIIncome gives the best result with error 1657606433. RBoth is second with error 1662160777. This makes sense as in loan applications income is the most important factor.

part 3.

Income:

best cut off = 0.16

predictIncome 0 1

0 323 1

1 113 63

sensitivity = $323 / (323 + 113) = 0.74082568807$

specificity = $63 / (63 + 1) = 0.984375$

Age:

best cut off = 0.175

predictAge 0 1

0 373 8

1 63 56

sensitivity = $373 / (373 + 63) = 0.85550458715$

specificity = $56 / (56 + 8) = 0.875$

Both:

best cut off = 0.18

predictBoth 0 1

0 373 8

1 63 56

sensitivity = $373 / (373 + 63) = 0.85550458715$

specificity = $56 / (56 + 8) = 0.875$