Multiple Discriminant Analysis

Group 5: MVA

Multiple discriminant is a technique in which we require the dependent variable as categorical factors or levels in factor. When compared this to our dataset it is not applicable to our dataset because the dependent variable (y) i.e. Life expectancy in our case it contains metric(numeric) data. Hence, as discussed in the class the Multiple discriminant Analysis cannot be implemented.

In our dataset out target variable is Life Expectancy (dependent variable) and it is in numeric in nature and not a categorical data.

Therefore, Multiple Discriminant analysis cannot be applied to our dataset as for Multiple discriminant analysis the dependent variable column should be a categorical data or should have factors in levels.

```
bl wdbc_raw.ida <- Ida(Life.expectancy ~ ., data=new.life, family="binomial")
     summary(wdbc_raw.lda)
 63
 64
     class(new.life$Life.expectancy)
 65
 65:1 ## USing the Multiple Discriminant $
Console Terminal × Jobs ×
C:/asif_work/2nd semester/MVA/Group Submission 07/submitted/
The following objects are masked from 'package:fma':
   cement, housing, petrol
> wdbc_raw.lda <- lda(Life.expectancy ~ ., data=new.life, family="binomial")
Error in lda.default(x, grouping, ...):
                                 9 10 11 12
                                                13
 variables
 31 34 35 36 37 38 39 40 41 42 44 45 46 47 48 49
                                                                50 51
                                                                        52
                                                                           53 54
   60 61 62 63 65 66 67 68 69 70 71
                                                72
                                                   73 74 75
                                                                76 77
                                                                           79 81 83
88 89 90 91 92 93 95 96 97
                                   99 101 102 105 106 107 108 109 110 111 112 113 115 116 117 118
120 121 122 124 125 126 127 128 129 130 131 132 133 134 136 137 138 139 140 142 143 144 145 146 147
148 149 150 151 153 154 155 156 157 159 161 162 163 166 167 168 169 170 171 172 173 174 175 176 177
178 180 181 182 183 184 185 186 187 188 189 190 194 appear to be constant within groups
> summary(wdbc_raw.lda)
Error in summary(wdbc_raw.lda) : object 'wdbc_raw.lda' not found
> class(new.life$Life.expectancy)
[1] "numeric'
```

When we run the lda, we get this result in our case as Error. As the values associated with the dependent variable (Life.expectancy) are numeric.

Therefore, we cannot apply logistic multiple discriminant technique to our analysis.