M HASSAAN LATEEF

SP20-BCS-155

Assignment # 4

Question # 1

i.   The dataset contains 80 instances.

ii.   The dataset contains 7 input attributes.

iii.   The output attribute has two possible values.

iv.   Two input attributes are categorical which are Hair Length and eye color.

v.   The class ratio of Male-Female is (46-34) which is (1.4).

Question # 2

Incorrect instances found:

   1- Incorrectly classified using standard split:

   Random forest = 0

   SVC = 6

   MLP = 3

   2- INCORRECTLY CLASSIFIED BY 80/20 SPLIT:

   Random forest = 0

   SVC = 3

   MLP = 0

   3- Excluding attributes:

   Scarf and beard are the two most important. They have both consistent values for both male and females. So they are most important.

   4- After excluding Scarf and Beard:

   Random forest = 1

   SVC = 3

   MLP = 4

   After excluding these two the performance of model decrease.