# Tuo Hou//50142108

# F5

root split at 460 >50K (0.48728814 0.51271186) sensitivity = 0.6966292 specificity = 0.8571429

accuracy = 0.7777778

# F10

root split at 460 >50K (0.48728814 0.51271186)

sensitivity = 0.7191011 specificity = 0.8791209 accuracy = 0.8

## F14

root split at 460 >50K (0.48728814 0.51271186)

sensitivity = 0.6853933 specificity = 0.8681319 accuracy = 0.7777778

# H5

root split at 226 >50K (0.4829060 0.5170940)

sensitivity = 0.7640449 specificity = 0.7692308 accuracy = 0.7666667

## H10

root split at 226 >50K (0.48290598 0.51709402)

sensitivity = 0.7865169 specificity = 0.8351648 accuracy = 0.8111111

## H14

root split at 226 >50K (0.48290598 0.51709402)

sensitivity = 0.7865169 specificity = 0.8241758 accuracy = 0.8055556

# H10 gives highest accuracy.

In general, more features and more data wouldn't necessarily give better test accuracy. For both dataset, 10 features gives the best result.

Larger dataset gives lower accuracy.