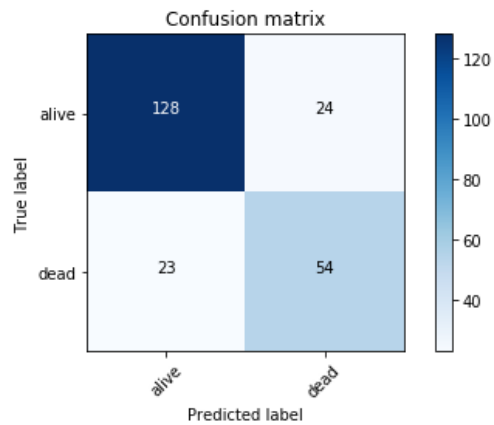


1. 結果截圖

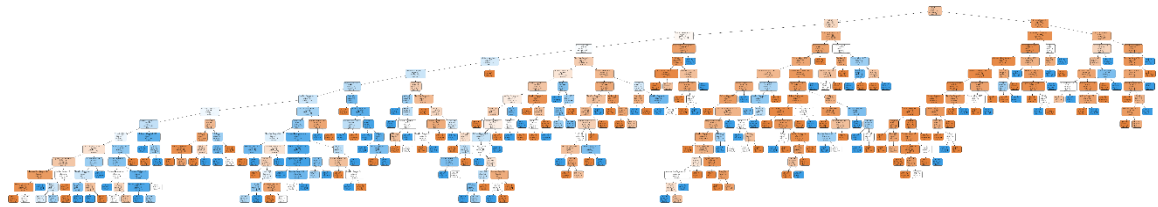
(1)

```
In [8]: runfile('A:/Homework/DM/HW1/0753420_HW1.py')
```



```
***** training data *****  
accuracy = 0.940406976744186  
  
***** testing data *****  
precision = 0.6923076923076923  
recall = 0.7012987012987013  
accuracy = 0.7947598253275109
```

(2) 15 layers



2. 說明與討論

為取得更高的 testing accuracy，有嘗試調整：

1. 不同的 random_state，切割出不同的 training dataset, testing dataset
2. Decision tree 參數，如 random_state、max_depth

最後得到最好的結果如上圖所示，testing data 的 precision 69.23%, recall 70.129, testing accuracy 79.47%，整體來說模型的性能還不錯。