

CS 5665 Homework #2
Karun Joseph, A02240287

All code, plots reside here:

<https://github.com/karunmj/usu-coursework/tree/master/cs5660datasc/hw/hw2>

This is a late submission (by one day) to the classification accuracy question

5. Classification accuracy of decision tree from Python's sklearn

For the confusion matrix from test set data,

True label	Circle	1108	1067	197
	Fireball	733	991	117
	Triangle	685	711	158
		Circle	Fireball	Triangle
		Predicted label		

TP, TN, FP and FN along with their accuracy ($\frac{T_p+T_n}{T_p+T_n+F_p+F_n}$) are found as follows

Circle:

TP: 1108

FP: 1418

FN: 1264

TN: 1977

Accuracy: 0.534940176868

Fireball:

TP: 991

FP: 1778

FN: 850

TN: 2148

Accuracy: 0.544303797468

Triangle:

TP: 158

FP: 314

FN: 1396

TN: 3899

Accuracy: 0.703485347668