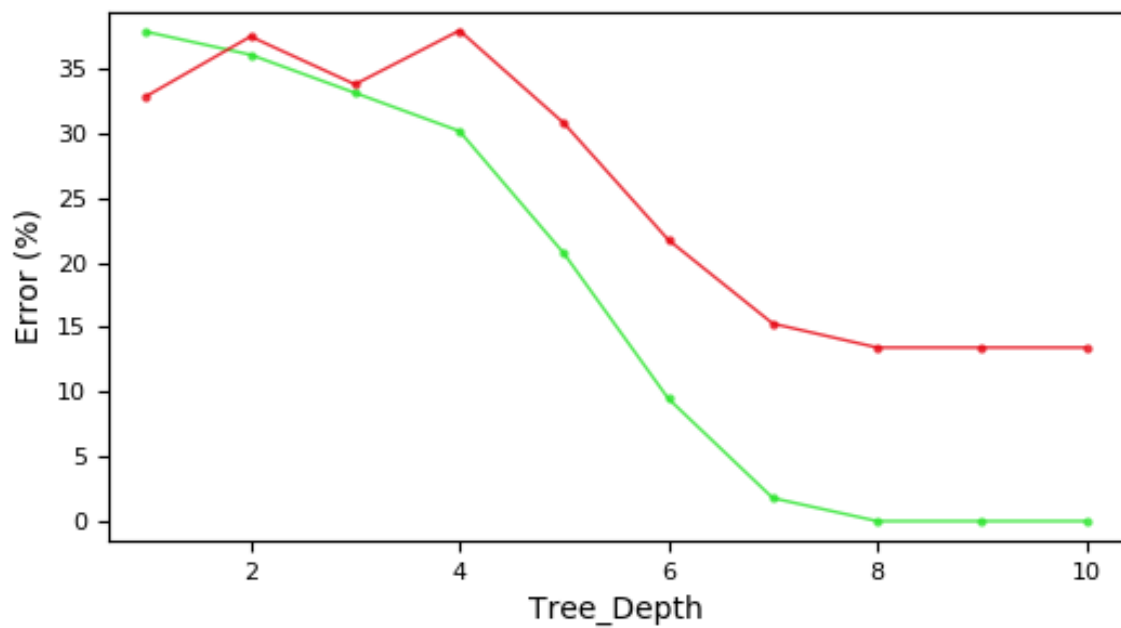
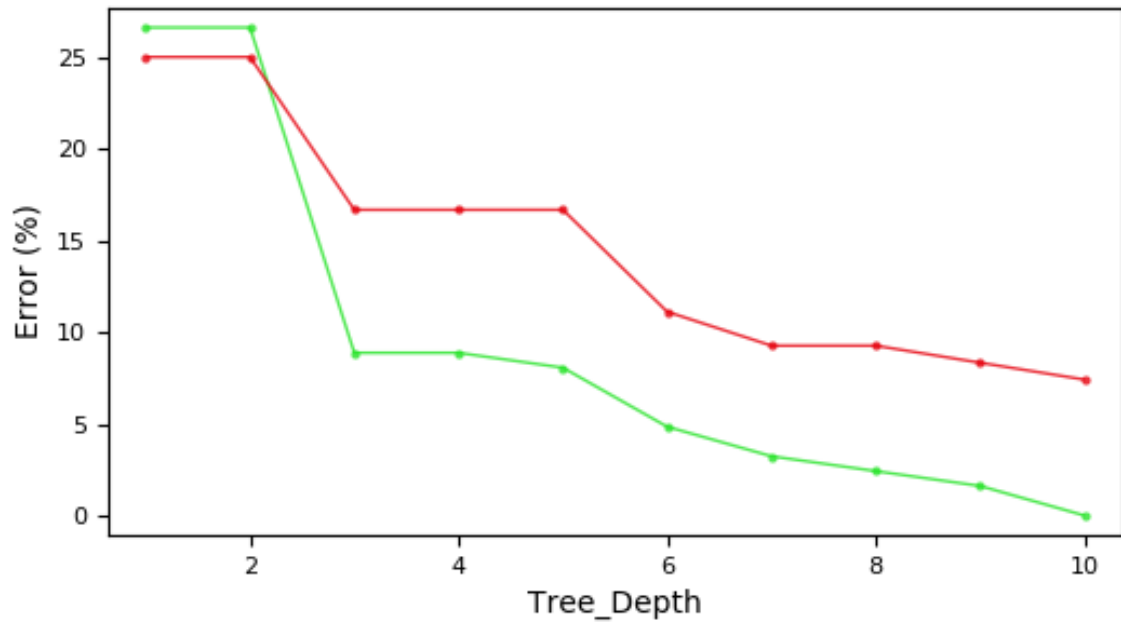
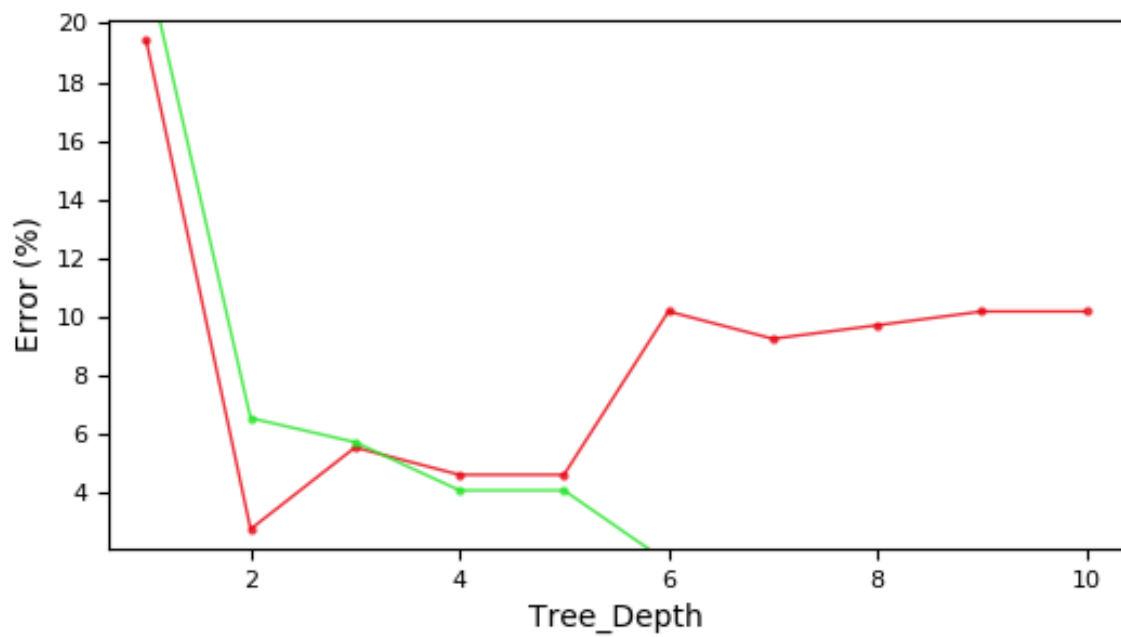


# ID3 Decision Tree - Project 1

## A. Learning Curves:





## B. Weak Learners:

`{(5, 1, True): 1, (5, 1, False): 0}`

===== Depth: 1 =====

TP: 108 FN: 108

FP: 0 TN: 216

=====

`{(5, 1, True): 1, (5, 1, False): {(1, 1, True): 0, (1, 1, False): 0}}`

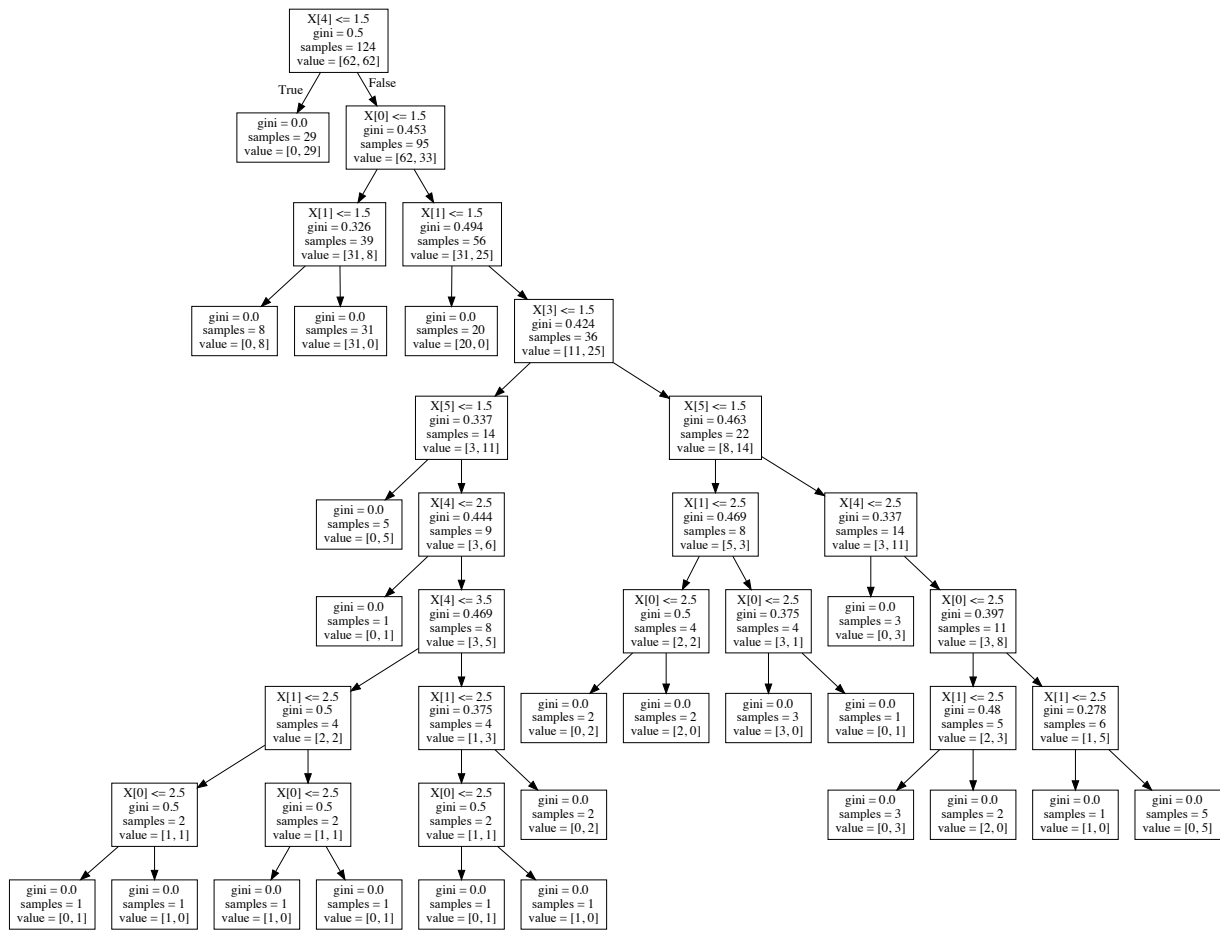
===== Depth: 2 =====

TP: 108 FN: 108

FP: 0 TN: 216

=====

## C. Scikit-Learn:



[[183 15]  
[ 33 201]]

## D. Other Dataset - Adult Income:

```
{{2, 'Married-civ-spouse', True): 0, (2, 'Married-civ-spouse', False): 0}  
===== Depth: 1 =====  
TP: 0  FN: 3846  
FP: 0  TN: 12435  
=====
```

```
{{(2, 'Married-civ-spouse', True): {(10, '(12.0, 16.0]', True): 1, (10, '(12.0, 16.0]', False): 0}, (2, 'Married-civ-spouse', False): {(11,  
'(7298.0, 14084.0]', True): 1, (11, '(7298.0, 14084.0]', False): 0}}  
===== Depth: 2 =====  
TP: 1650  FN: 2196  
FP: 627  TN: 11808  
=====
```