

```

1  # 10tests.py
2  import pandas as pd
3  import numpy as np
4  from implementation_from_scratch import *
5  from weka_implementation import *
6  import weka.core.jvm as jvm
7  # Define a range of train/test split proportions
8  proportions = [0.05, 0.15, 0.25, 0.35, 0.45, 0.55, 0.65, 0.75, 0.85, 0.95]
9
10 jvm.start()
11
12 # For each proportion
13 for split in proportions:
14     # Read in the data
15     data = pd.read_csv('beer.csv')
16
17     # declare Queue for Tree output storage
18     Q = Queue()
19     # Create tree
20     createTree(data, split, mp.Event(), Q)
21
22     # Get the tree output
23     queue_data = Q.get()
24     root_node = queue_data[0]
25     test_data = queue_data[1]
26
27     # Get the accuracy of the tree and test it
28     python_accuracy = test_tree(root_node, test_data, split)
29
30     # Build and test the weka tree
31     weka_accuracy, weka_time_to_build = build_weka(split)
32
33 jvm.stop()

```