Task1:
You will have to run 3 decision tree ensemble algorithms and 1 straight decision tree. Use Python with Scikit-Learn. Run

1. a standard decision tree
2. Randomforest
3. AdaBoost
4. Bagging

Run all four algorithms on 3 datasets:

1. [Arrhythmia](#)
2. [Caesarian](#)
3. [Phishing Websites](#)

Make sure you do an appropriate number of runs so you can tell which algorithm is better on which datasets. Make sure you specify any hyperparameters chosen for the algorithm. The preference is for you to use the default settings on all systems. Set the number of trees to 10 in the ensembles.

Task 2

Choose another ensemble algorithm of your choice and do the same experimental design as you used above (now with 5 algorithms). You can choose any ensemble technique you prefer for the last algorithm.

Task3:

Bonus task: (more interesting, fewer marks) Finding another dataset on which the ensemble method which does not perform best on any of the 3 datasets in Task 2 performs best.