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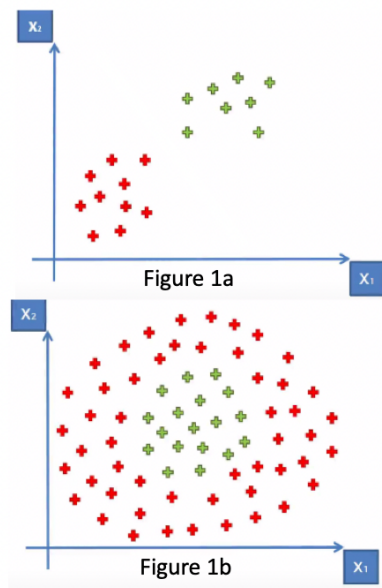
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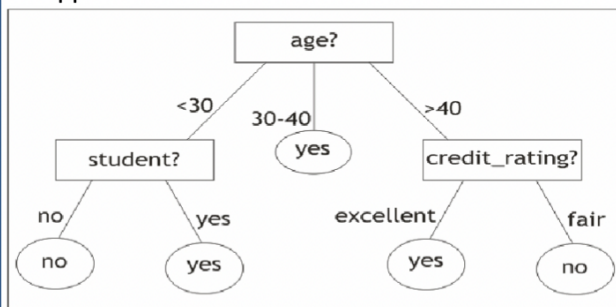
In-Class Problems

1. Which Python SVM method would be the best to use, and why for:

- a) Figure 1a
- b) Figure 1b



2. Write the rule set for this credit card application approval Decision Tree.



3. Create a Decision Tree classifier for the training data to the right.

Tid	Refund	Marital Status	Taxable Income	Cheat
1	Yes	Single	125K	No
2	No	Married	100K	No
3	No	Single	70K	No
4	Yes	Married	120K	No
5	No	Divorced	95K	Yes
6	No	Married	60K	No
7	Yes	Divorced	220K	No
8	No	Single	85K	Yes
9	No	Married	75K	No
10	No	Single	90K	Yes

SVM & DT Classifiers Classifiers

David O. Johnson EECS 690 (Spring 2021)

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1. Which python SVM method would be the best to use?

- a. Linear-SVC
- b. Nu-SVC

2. Write the rule set for this credit card application approval Decision tree

R1: IF (age < 30 And Student = 'no') Then 'no'

R2: IF (age < 30 And Student = 'yes') Then 'yes'

R3: IF (30 <= age <= 40) Then 'yes'

R4: IF (age > 40 And credit_rating = 'excellent') Then 'yes'

R5: IF (age > 40 And credit_rating = 'fair') Then 'no'

3. Create Decision Tree classifier for the training data to the right

