AI Coding Homework 1 Report

What is the difference to a random 60 − 10 − 30 split of the whole data as compared to split class-wise? Why I asked you to split classwise ?

Class wise splitting will make sure that the training data sample of each class will be evenly distributed and may accurately reflect the full data. A random split of the whole data may result in unfair distribution (such as having too many winter in training and too many summer in testing). Class wise splitting is a stratified sampling which is better than random sampling since it allows proportionate distribution.

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Bnqing@LAPTOP-BNQADCNU:~/Downloads/AI/week2/HW1$ python3 Choo_Han_Ye_AIHW1.py
class-wise accuracy: {0.1: array([0.71296296]), 0.31622776601683794: array([0.69259259]), 3.1622776601683795: array([0.7
0925926]), 1: array([0.70740741]), 10: array([0.70925926]), 0.01: array([0.78518519])}
vanilla accuracy: {0.1: array([0.71296296]), 0.31622776601683794: array([0.69259259]), 3.1622776601683795: array([0.7092
5926]), 1: array([0.70740741]), 10: array([0.70925926]), 0.01: array([0.78518519])}
Best C is 0.01
Vanilla accuracy for test data is [0.78615196]
Class-wise average accuracy for test data is [0.78615196]
```