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CS 370

A3 Written

## 1. Question 1

The classifications for training are dependent on the running times, which are made up of  $O(N^*k^*c)$  plus actual classification times  $O(k^*c)$ .

# 2. Question 2

This can be achieved by using means of other predictive attributes in lieu of certain null values.

## 3. Question 3

2.00

4.50

15.40

= 21.90

#### 4. Question 4

А	С
1	а
3	а
2	b
4	С

## 5. Question 5

The classifications here have hard boundaries, but it uses a sliding probability scale in reality, so these cases do not fit the given situation.

## 6. Question 6

There is an average of values and it is used to collect a centroid. In this case, we have multiple centroids and need a Q exemplar point. Determining if there is a minimum exemplar point and a maximum exemplar point is the main step in determining and classifying the sets of points in order to get a main point.

## 7. Question 7

```
If X.A < 3 then X.C = a;

If 3 < X.A < 4 then X.C = b;

If 4 < X.A. < 8 then X.C. = c

If 8 < X.A < 9 then X.C = d;

If 9 < X.A. then X.C = e
```