1. Reason:

I selected ‘course\_name’ as the partition key, and ‘course\_id’ as sort key. Every course in USC is unique with a course name and id. For example, this course data management is identified as DSCI551.

Using the course name as the partition key allows for efficient retrieval of all information related to a specific course, as all data for a given course will be stored in the same partition.

The sort key allows you to differentiate between multiple courses with the same name, as the combination of course\_name and course\_id will be unique for each course.

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1. .

Course name and course id are strings. Strings are identified as “S”, so they are shown as:

A computer code with text

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Capacity is a number. Number is identified as “N”:

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***Homework*** is an attribute of String set, which contains different homework topics:

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***Lecturer*** is a String: A close-up of a computer code

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***TAs*** is a *list* of Strings:

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***Timetable*** is a map, identifying as ‘M’.

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**Scan**:

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**Query**:

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