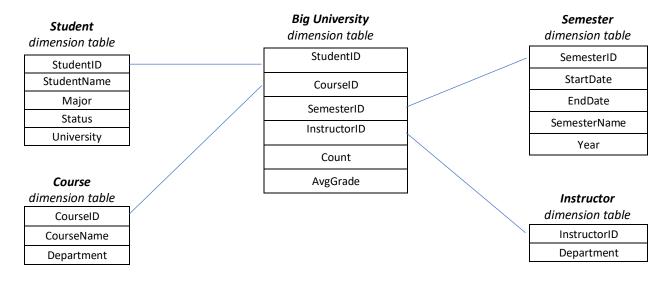
Domas Budrys – Assignment 3 CSCI5080

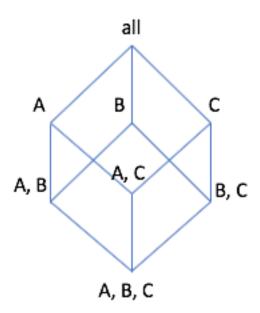
PART I: Question 1 (Time spent: 1h 45min): A)



Roll-up on Course from CourseID to Department
Roll-up on Student from StudentID to University
Dice on Course, Student with Department = 'CS' and university = 'Big-University'
Drill-down on Student from University to StudentName

C) 625 Cuboids

PART I: Question 2 (Time spent: 2h 15min): A)



```
B)

1-D Cuboid (*4 bytes)

A: 1,000,000 * 4 = 4,000,000

B: 100 * 4 = 400

C: 10,000 * 4 = 40,000

2-D Cuboid (*4 bytes)

AB: 1,000,000 * 100 * 4 = 40,000,000

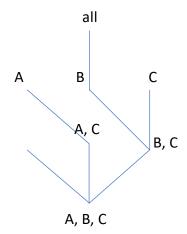
AC: 1,000,000 * 10,000 * 4 = 40,000,000,000

BC: 100 * 10,000 * 4 = 4,000,000

3-D Cuboid (*4 bytes)

ABC: 1,000,000 * 100 * 10,000 * 4 = 4,000,000,000,000

Total bytes: 4,040,408,040,400
```



1 chunk of plane A,C = 400,000,000
10 chunk of plane A,B = 400,000,000
100 chunk of plane B,C = 4,000,000

Total bytes: 804,000,000

PART II: (Time spent: 3h 30min):

Question 3:

