Data Intensive Computing
Project 2 – Part 2
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**Introduction**:
The following report contains 5 questions regarding scheduling of classrooms at the University at Buffalo. The answers to these questions were extracted from the data using Hadoop MapReduce Algorithms.

**Q1.What is the busiest/most popular hour between 8am and 12pm in each semester?**
Dataset – CourseRoom.csv
Program – TimeProblem.java
In the first stage, the total number of classes at each time period in every semester is found. In the second stage, the time period with the max number of classes is found for every semester.

**Q2.Which hall has the highest seat utilization in each year? (Only halls with at least 20 classes in each year are considered)**
Dataset – CourseRoom.csv
Program – Overbooked.java
In the first stage, the average seat utilization is calculated for each hall in each year. In the second stage we find the hall with the highest seat utilization in each year.

**Q3.Which is the most used hall by seat capacity on each working day in every year?**
Dataset – CourseRoom.csv
Program – DaysProblem.java
In the first stage, we calculate the number of students attending classes in each hall on every day of the week in each year. In the second stage, we find out which hall was most utilized on each day of the week in every year.

**Q4.What is the difference in course enrollments in Spring and Fall semesters every year?**
Dataset – CourseRoom.csv
Program – CourseEnroll.java
In the first stage, we calculate the total enrollments in each semester in every year.
In the second stage, we calculate the difference between enrollments in Spring and Fall semesters.

**Q5.What is the change in the number of students writing exams in each department in consecutive years?**
Dataset – ExamSchedule.tsv
Program – ExamEnroll.java
In the first stage, we calculate the total number of students writing exams in each department in each year. In the second stage, we calculate the change in number of students writing exams in each department.