COMS 4111 Intro to DB HW2

Name (UNI)

October 4, 2018

1 Relational Algebra

- Q1: write your solution here
- Q2: write your solution here

2 More Relational Algebra

1. $\pi_{A,B}(T1)$: write your solution here

2. $T1 \times \pi_A(T1)$: write your solution here

3. $T1 \bowtie_{T1.B=T2.C} T2$: write your solution here

4. $T1 - (T1 \cap T2)$: write your solution here

5. $T2 \bowtie_{T2.A<T1.B} (\sigma_{B<=2}(T2))$: write your solution here

6. $T1 \bowtie (\sigma B = C(T2))$: write your solution here

3   SQL

1. $\pi_{name,age}(Student)$

    write your solution here

2. $Student \times \pi_{age}(Student)$

    write your solution here

3. $Student \bowtie_{Student.name=Teacher.name} Teacher$

    write your solution here

4. $Student - (Student \cap Teacher)$

    write your solution here

5. $(\sigma_{year=2018}(Student)) \bowtie_{Student.age<Teacher.age} (\sigma_{name=engene}(Teacher))$

    write your solution here

6. $Student \bowtie (\sigma_{age<=50}(Teacher))$

    write your solution here

4 Acknowledgement