

COMS 4111 Intro to DB HW2

Name (UNI)

October 6, 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. $T1 \bowtie_{T1.A < T2.B} (\sigma_{B \leq 2}(T2))$: 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. $(\sigma_{year=2018}(Student)) \bowtie_{Student.age < Teacher.age} (\sigma_{name=engine}(Teacher))$

write your solution here

6. $Student \bowtie_{(\sigma_{age \leq 50}(Teacher))}$

write your solution here

4 Acknowledgement