## COMP 3005 Assignment #1

```
1. T1:= project P# (select Name = 'Lastname' (Person))
    T2:= T1 njoin Play
    T3:= project Name (T2 njoin Hobyy)
    Result: Name
           Chess
           Dancing
2. T1:= project H# (select Name = 'Bowling'(Hobby))
  T2:= Play / T1
  T3:= project Name (T2 njoin Person)
  Result: Name
          Smith
          Jones
3. T1:= select Times > 3 (Play)
   T2:= Person njoin T1
   project Name (T2)
  Result: Name
          Smith
          Jones
          Lastname
4. T1:= select Name = 'Chess'(Hobby)
   T2:= select Name = 'Dancing'(Hobby)
   T3:= Play / T1
   T4:= Play / T2
   T5:= T3 union T4
   T6:= T5 join Person (P# = P#)
    project Name (T6)
  Result: Name
           Smith
           Jones
           Blake
           Lastname
```

```
5. T1:= select Name = 'Chess' and Name = 'Dancing' (Hobby)
   T2:= project H#(T1)
   T3:= Play / T2
   T4:= T3 join Person (P# = P#)
   project Name (T4)
```

### **Result: Name**

Smith Jones Blake Lastname

6. T1(H#, Name2):= project H#, Name (Hobby) T2:= Person njoin Play (P# = P#) T3 := T2 njoin T1(H# = H#)project Name, Name2 (T3)

#### **Result: Name** Name2

Smith **Bowling** Smith Chess Smith Dancing Smith Hiking Smith Skating Smith Ski Jones Bowling Jones Chess Jones Dancing **Jones** Hiking Blake Chess Blake Dancing Lastname Chess Lastname Dancing

```
7. T1:= project H# (select Name = 'Ski'(Hobby))
   T2:= Play / T1
   T3:= Play join T2 (P# \neq P#)
   T4:= T3 njoin Person (P# = P#)
   project Name (T4)
```

### **Result: Name**

Jones Blake Lastname

```
8. T1:= Project P#(Person)
   T2:= Project P#(Play)
   T3:= T1 - T2
   T4:= T3 njoin Person (P# = P#)
   project Name (T4)
  Result: Name
          Adams
9. T1:= project H#(Hobby)
   T2:= Play / T1
   T3:= project P# (T2)
   T4:= T3 njoin Person (P# = P#)
   project Name (T4)
  Result: Name
          Smith
10. T1:= select Name = 'Lastname' (Person)
   T2:= project H# (T1 njoin Play)
   T3:= Play / T2
   T4:= T3 njoin Person (P# = P#)
   project Name (T4)
  Result: Name
           Chess
          Dancing
11.
12. T1:= project H# (select Name ≠ Skating and Name ≠ Ski (Hobby))
   T2: Play / T1
   T3:= T2 \text{ njoin Person } (P\# = P\#)
   project Name (T3)
```

**Result: Name** 

Smith Jones

13. aggregate P#, sum (Times)(Play) aggregate count (H#)(Hobby) project Name (Person)

Result: 39

6

# **Names**

Smith Jones Blake Lastname Adams

14.