a)

emp = LOAD 'employee\_details.txt' USING PigStorage(',') AS (emp\_id:int, emp\_name:chararray, emp\_salary:int, emp\_rating:int);

emp\_ordered = ORDER emp by emp\_rating DESC, emp\_name ASC;

emp\_select = FOREACH emp\_ordered GENERATE emp\_id,emp\_name;

dump emp\_select;

b)

emp = LOAD 'employee\_details.txt' USING PigStorage(',') AS (emp\_id:int, emp\_name:chararray, emp\_salary:int, emp\_rating:int);

emp\_odd\_numbered = FILTER emp by (emp\_id%2 != 0);

emp\_odd\_numbered\_ordered = ORDER emp\_odd\_numbered by emp\_salary DESC, emp\_name ASC;

emp\_select = FOREACH emp\_odd\_numbered\_ordered GENERATE emp\_id,emp\_name;

dump emp\_select;

c)

emp = LOAD 'employee\_details.txt' USING PigStorage(',') AS (emp\_id:int, emp\_name:chararray, emp\_salary:int, emp\_rating:int);

emp\_expenses = LOAD 'employee\_expenses.txt' AS (emp\_id:int, expenses:int);

joined\_emp = join emp by emp\_id, emp\_expenses by emp\_id;

joined\_emp\_total\_expenses\_group = GROUP joined\_emp BY emp::emp\_id;

joined\_emp\_total\_expenses = FOREACH joined\_emp\_total\_expenses\_group GENERATE group,joined\_emp.emp::emp\_name as empName, SUM(joined\_emp.emp\_expenses::expenses) as totalExpenses;

joined\_emp\_total\_expenses\_ordered = ORDER joined\_emp\_total\_expenses by totalExpenses DESC;

dump joined\_emp\_total\_expenses\_ordered;

d)

emp = LOAD 'employee\_details.txt' USING PigStorage(',') AS (emp\_id:int, emp\_name:chararray, emp\_salary:int, emp\_rating:int);

emp\_expenses = LOAD 'employee\_expenses.txt' AS (emp\_id:int, expenses:int);

emp\_with\_exp = JOIN emp BY emp\_id, emp\_expenses BY emp\_id;

emp\_with\_exp\_data = FOREACH emp\_with\_exp GENERATE emp::emp\_id, emp::emp\_name;

emp\_with\_exp\_distinct\_data = DISTINCT emp\_with\_exp\_data;

dump emp\_with\_exp\_distinct\_data;

e)

emp = LOAD 'employee\_details.txt' USING PigStorage(',') AS (emp\_id:int, emp\_name:chararray, emp\_salary:int, emp\_rating:int);

emp\_expenses = LOAD 'employee\_expenses.txt' AS (emp\_id:int, expenses:int);

emp\_without\_exp = JOIN emp BY emp\_id LEFT OUTER, emp\_expenses BY emp\_id;

emp\_without\_exp\_filter = FILTER emp\_without\_exp BY emp\_expenses::emp\_id is null;

emp\_without\_exp\_filter\_data = FOREACH emp\_without\_exp\_filter GENERATE emp::emp\_id, emp::emp\_name;

DUMP emp\_without\_exp\_filter\_data;