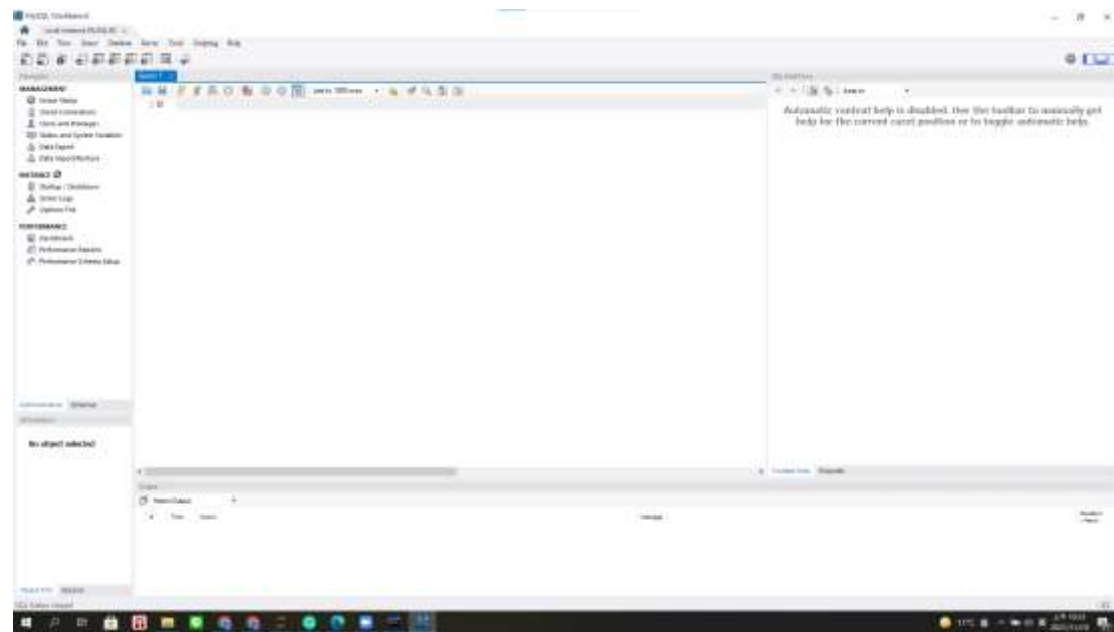


1.2

Dependent (depended employee id, Dependent name,age)

1.3



2.1.1 $(A \cap B) \cup C$

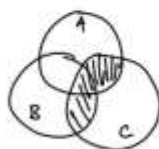


$(A \cup C) \cap (B \cup C)$

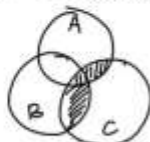


T

2.1.2 $(A \cup B) \cap C$

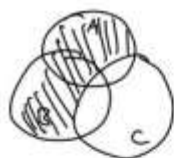


$(A \cap C) \cup (B \cap C)$

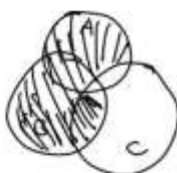


T

2.1.3 $(A \cup B) \setminus C$

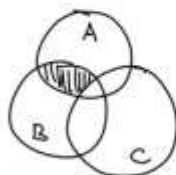


$(A \setminus C) \cup B$

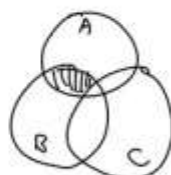


F

2.1.4 $(A \cap B) \setminus C$



$(A \setminus C) \cap B$



T

2.1.5 $A \setminus (B \cup C)$



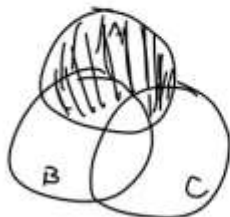
$(A \setminus B) \cap (A \setminus C)$



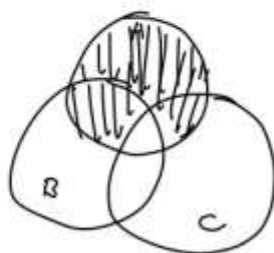
T

2.1.6

$A \setminus (B \cap C)$



$(A \setminus B) \cup (A \setminus C)$



T.

2.2

$$\pi_{name, Licensed}[\sigma_{start\ date > 2012}(Project \bowtie engineer)]$$

$$\pi_{project\ name}(\sigma_{employee_id < 10}(\text{project_name } G_{count(employee_id)}(Employee)))$$

/*2.2.1

SELECT name, Licensed

FROM(

SELECT Engineer.name, Engineer.Licensed, Project.Project_name, Project.start_date

FROM Engineer

JOIN Project

ON Engineer.project_name = Project.project_name) as new_table

WHERE `start_date` > '2012-01-01';

2.2.2

SELECT Project_name

FROM

(SELECT Project_name, count(employee_id) as number_of_employees

FROM Employee

GROUP BY Project_name) as t

WHERE number_of_employees>10;*/