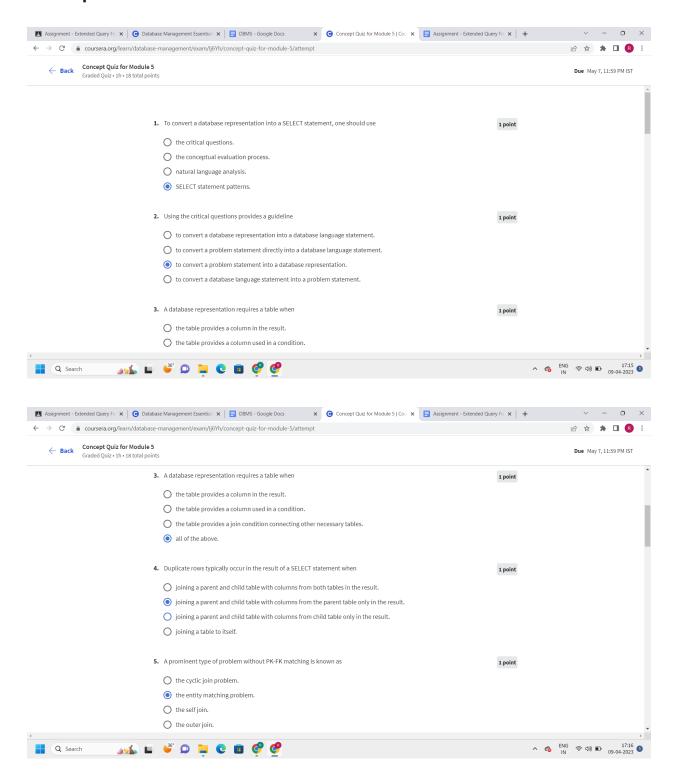
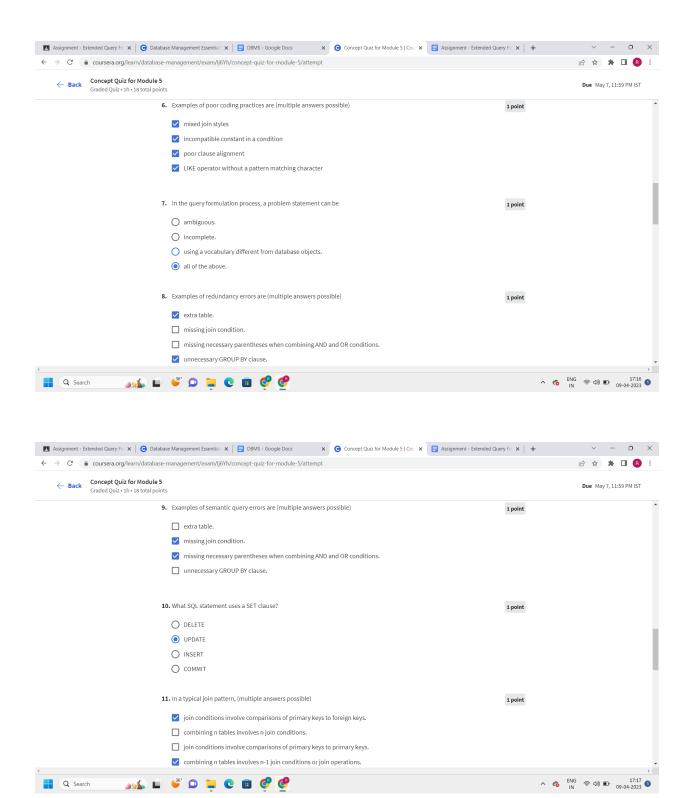
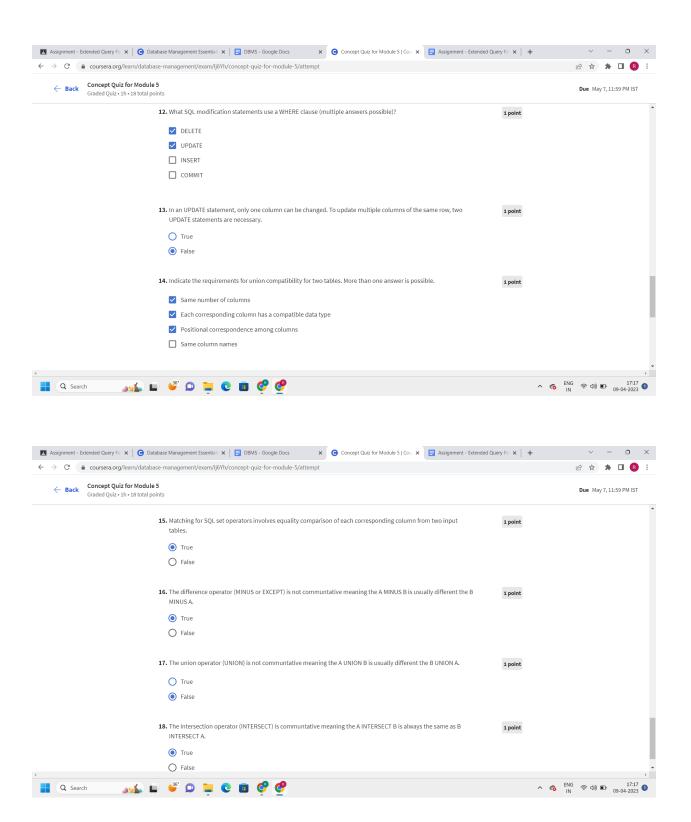
Concept Quiz for Module 5:







Module 5 assignment:

SELECT Statement Problems

1. For event requests, list the event number, event date (eventrequest.dateheld), and count of the event plans. Only include event requests in the result if the event request has more than one related event plan with a work date in December 2022

SELECT eventno, dateheld, COUNT(*) AS "Number of Plans"
FROM eventrequest, eventplan
WHERE eventrequest.eventno = eventplan.eventno
AND eventplan.workdate BETWEEN '1-Dec-2022' AND '31-Dec-2022'
GROUP BY eventrequest.eventno, dateheld
HAVING COUNT(*) > 1;

2.List the plan number, event number, work date, and activity of event plans meeting the following two conditions: (1) the work date is in December 2022 and (2) the event is held in the "Basketball arena". Your query must not use the facility number ("F101") of the basketball arena in the WHERE clause. Instead, you should use a condition on the FacName column for the value of "Basketball arena".

SELECT planno, eventno, workdate, activity
FROM eventrequest, eventplan, facility
WHERE eventrequest.eventno = eventplan.eventno
AND eventrequest.facno = facility.facno
AND eventplan.workdate BETWEEN '1-Dec-2022' AND '31-Dec-2022'
AND facname = 'Basketball arena';

3.List the event number, event date, status, and estimated cost of events where there is an event plan managed by Mary Manager and the event is held in the basketball arena in the period October 1 to December 31, 2022. Your query must not use the facility number ("F101") of the basketball arena or the employee number ("E101") of "Mary Manager" in the WHERE clause. Thus, the WHERE clause should not have conditions involving the facility number or employee number compared to constant values.

SELECT eventno, dateheld, status, estcost FROM eventrequest, employee, facility, eventplan WHERE eventplan.empno = employee.empno AND eventrequest.facno = facility.facno AND eventrequest.eventno = eventplan.eventno AND eventplan.workdate BETWEEN '1-Oct-2022' AND '31-Dec-2022' AND facname = 'Basketball arena' AND empname = 'Mary Manager';

4.. List the plan number, line number, resource name, count of resources (EventPlanLine.ResourceCnt), location name, time start, and time end where the event is held at the basketball arena, the event plan has activity of activity of "Operation", and the event plan has a work date in the period October 1 to December 31, 2022. Your query must not use the facility number ("F101") of the basketball arena in the WHERE clause. Instead, you should use a condition on the FacName column for the value of "Basketball arena".

SELECT planno, lineno, locname, resname, resourcecnt, timestart, timeend FROM facility, eventplan, eventplanline, resourcetbl, location WHERE eventplan.planno = eventplanline.planno
AND location.facno = facility.facno
AND location.locno = eventplanline.locno
AND eventplan.workdate BETWEEN '1-Oct-2022' AND '31-Dec-2022'
AND facname = 'Basketball arena' AND eventplanline.resno = resourcetbl.resno
AND eventplan.activity = 'Operation';

5. List the event plan number and sum of the resource cost for event plans. Only summarize event plans with a work date in December 2022. The resource cost is computed as the resource count (ResourceCnt) times the rate of the resource. The result should only include event plans with the sum of the resource cost greater than 50.

SELECT Planno, SUM(ResourceCnt * Rate) AS SumResCost FROM EventPlan, EventPlanLine, ResourceTbl WHERE EventPlan.PlanNo = EventPlanLine.PlanNo AND EventPlanLine.ResNo = ResourceTbl.ResNo AND WorkDate BETWEEN '01-Dec-2022' AND '31-Dec-2022' GROUP BY Planno HAVING SUM(ResourceCnt * Rate) > 50;

Database Modification Problems

1. Insert a new row into the Facility table with facility name "Swimming Pool".

```
INSERT INTO Facility (FacNo, FacName) VALUES ('F107', 'Swimming Pool');
```

2. Insert a new row in the Location table related to the Facility row in modification problem 1. The new row should have "Door" for the location name.

```
INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L107', 'F107', 'Door');
```

3. Insert a new row in the Location table related to the Facility row in modification problem 1. The new row should have "Locker Room" for the location name.

```
INSERT INTO Location (LocNo, FacNo, LocName) VALUES ('L108', 'F107', 'Locker Room');
```

4. Change the location name of "Door" to "Gate" for the row inserted in modification problem 2.

```
UPDATE Location SET LocName = 'Gate' WHERE LocNo = 'L107':
```

5. Delete the rows inserted in modification problems 2 and 3.

```
DELETE Location
WHERE LocNo = 'L107';
DELETE Location
WHERE LocNo = 'L108':
```

SQL Statements with Errors and Poor Formatting

1. Identify errors in the following SQL statement and label errors with error type (syntax, redundancy, or semantic). To simplify your work, the statement has only one type of error. Rewrite the statement to remove the error. SELECT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, employee, facility, eventplan WHERE estaudience > 5000 AND eventplan.empno = employee.empno AND eventrequest.facno = facility.facno AND facname = 'Football stadium' AND empname = 'Mary Manager'

(missing join condition)

SELECT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, employee, facility, eventplan WHERE estaudience > 5000

AND eventplan.empno = employee.empno

AND eventrequest.facno = facility.facno

AND eventrequest.eventno = eventplan.eventno

AND facname = 'Football stadium'

AND empname = 'Mary Manager';

2. Identify errors in the following SQL statement and label errors with error type (syntax, redundancy, or semantic). To simplify your work, the statement has only one type of error. Rewrite the statement to remove the error. SELECT DISTINCT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, eventplan WHERE estaudience > 4000 AND eventplan.eventno = eventrequest.eventno GROUP BY eventrequest.eventno, dateheld, status, estcost

(group by not required)

SELECT DISTINCT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, eventplan
WHERE estaudience > 4000
AND eventplan.eventno = eventrequest.eventno;

3. Identify errors in the following SQL statement and label errors with error type (syntax, redundancy, or semantic). To simplify your work, the statement has only one type of error. Rewrite the statement to remove the error. SELECT DISTINCT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, employee, facility, eventplan WHERE estaudience > 5000 AND eventplan.empno = employee.empno AND eventrequest.facno = facility.facno AND eventplan.eventno = eventrequest.eventno AND facname = 'Football stadium'

(extra table employee)

SELECT DISTINCT eventrequest.eventno, dateheld, status, estcost FROM eventrequest, facility, eventplan WHERE estaudience > 5000

AND eventrequest.facno = facility.facno AND eventplan.eventno = eventrequest.eventno AND facname = 'Football stadium';

4. Identify errors in the following SQL statement and label errors with error type (syntax, redundancy, or semantic). To simplify your work, the statement has only one type of error. Rewrite the statement to remove the errors. SELECT DISTINCT eventno, dateheld, status, estcost FROM eventrequest, employee, eventplan WHERE estaudience BETWEN 5000 AND 10000 AND eventplan.empno = employee.empno AND eventrequest.eventno = eventplan.eventno AND empname = 'Mary Manager'

(misspelled keyword BETWEN)

SELECT DISTINCT eventno, dateheld, status, estcost FROM eventrequest, employee, eventplan WHERE estaudience BETWEEN 5000 AND 10000 AND eventplan.empno = employee.empno AND eventrequest.eventno = eventplan.eventno AND empname = 'Mary Manager';

5. Identify areas in which the SQL statement has poor coding practices and rewrite the statement to improve the coding practices. You do not need to search for syntax errors. SELECT eventplan.planno, lineno, resname, numberfld, timestart, timeend FROM eventrequest, facility, eventplan, eventplanline, resourcetbl WHERE estaudience = '10000' AND eventplan.planno = eventplanline.planno AND eventrequest.facno = facility.facno AND facname = 'Basketball arena' AND eventplanline.resno = resourcetbl.resno AND eventrequest.eventno = eventplan.eventno

(Incompatible constant => WHERE estaudience = '10000')

AND facname = 'Basketball arena';

SELECT eventplan.planno, lineno, resname, resourcecnt, timestart, timeend FROM eventrequest, facility, eventplan, eventplanline, resourcetbl WHERE estaudience = 10000

AND eventplan.planno = eventplanline.planno

AND eventrequest.facno = facility.facno

AND eventplanline.resno = resourcetbl.resno

AND eventrequest.eventno = eventplan.eventno