

1.

-- Original statement

-- Semantic error: missing join condition (eventrequest-eventplan)

```
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';
```

-- Corrected statement

```
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.

-- Original statement

-- Redundancy error: GROUP BY clause not needed

```
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;
```

-- Corrected statement with no GROUP BY clause

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

3.

-- Original statement

-- Redundancy error: extra table (employee)

```
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';
```

-- Corrected statement

```
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.

-- Original statement

-- Syntax errors: misspelled keyword (BETWEN) and unqualified name (eventno)

```
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';
```

-- Corrected statement

-- Note: eventno can be qualified with either eventrequest or eventplan table

```
SELECT DISTINCT eventrequest.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.

-- Original statement with poor coding practices

-- Poor clause and condition alignment

-- Incompatible constant in WHERE condition: estaudience = '10000'

```
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;
```

```
-- Rewritten statement with improved coding practices
-- Note: many ways to reformat the statement
-- Should align clauses and conditions
-- Numeric constant in WHERE condition: estaudience = 10000
```

```
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;
```