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ICS 313-02(002)

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Quiz # 4

Name: \_\_\_\_\_

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**Question 1:**

**(3 points)**

**Expressions and assignment statements are closely related in the design of programming languages, describe this relationship.**

**Question 2:**

**(3 points)**

**Short-circuit evaluation of expressions exposes the problem of allowing side effects in expressions. Explain by example.**

**Question 3:**

**(6 points)**

**What does the following program do?**

```
do      q1 < q2 → t1 := q1 ; q1 := q2; q2:= t1;
      []   q3 < q4 → t1 := q3 ; q3 := q4; q4:= t1;
      []   q2 < q3 → t1 := q2 ; q2 := q3; q3:= t1;
od
```