**Part 1**

1. Explain the difference between an explicit and implicit transaction?

Implicit transactions have no beginning or end. Explicit transactions have a beginning, end, and the ability to be rolled back (Undone)

1. What is the default transactional behavior of SQL server? IMPLICIT TRANSACTION OR EXPLICIT TRANSATION how does one override that behavior?

Implicit transaction. You switch it by using the command implicit\_transaction off

1. How do you start an implicit transaction in SQL?
2. How do you start an explicit transaction in SQL?
3. Describe a scenario for which one would use IMPLICIT TRANSACTIONS)?
4. Describe a scenario for explicit transactions in the real-world.
5. If you have a stored procedure and the body of that stored procedure executes more than one update statement, should you use a transaction? Why or why not?
6. As demonstrated from the two colors example, a key benefit of transactions is that they do not allow for intermediate states (for example if one insert works, but the other fails, then they both fail). Explain the importance of not allowing intermediate states.
7. If you try to use the two colors procedure you created in the lab to add the colors blue and purple what will happen and why? (What gets inserted, does the transaction succeed?)
8. If you try to use the two colors procedure you created in the lab to add the colors pink and teal what will happen and why? (What gets inserted, does the transaction succeed?)

**Part 2**

1. What does the create user statement do? Hint: It’s not creating a user….
2. Which types of objects are securable with GRANT and DENY statements?
3. Describe a scenario by which you would not want a user reading the table directly but rather using a view instead.
4. Describe a scenario by which you would not want a user updating data in the table directly but rather using a stored procedure instead?
5. Write SQL to deny the guest user permissions to delete from the colors table you created in part two.
6. Write SQL to allow the guest user the ability to run an SQL View of your choosing
7. Write SQL to give the guestuser permissions to insert and read data from the colors table you created in part two.
8. Write SQL to give the guestuser permissions to execute the p\_add\_two\_colors stored procedure you created in part two.