

CMPT 354 –Database Systems I (Section D100)

Assignment #6

Instructor: Richard Frank (rfrank@sfu.ca)

TA: Ankit Gupta (aga53@sfu.ca)

Total Marks: 50 (5% of the Individual Assignments)

Due Date: Oct 28, 14:30

For all questions, use the AdventureWorksLT database.

Question 1) Provide the SQL commands to accomplish the below. Note that each question could contain multiple queries.

- a) Add a new customer John Doe who lives at 456 Main Street, Burnaby, BC, V1V2V3. For the password-hash and salt, just put 'password' and 'salt', respectively. [10 marks]
- b) Apply a \$10 tax-rebate to each order. If a 10\$ tax-rebate is not possible, apply the largest rebate you can. Reduce the total due by the corresponding amount. [5 marks]
- c) Count the number of addresses for each customer. [2 marks]
- d) Calculate the average, minimum and maximum prices of all products in the database. [3 marks]
- e) Display all product model names and their descriptions (from the ProductDescription table), display the product model name even if the description does not exist. [8 marks]
- f) Count the number of NULL descriptions from the above question e). [2 marks]

Question 2)

- a) Consider Question 1a). Create a database procedure out of it. [8 marks]
- b) Write a sample command to run the procedure. [2 marks]
- c) What happens if the database crashes in the middle of executing the procedure? What is rolled back? [3 marks]
- d) Modify the procedure so the entire thing is a transaction on its own. [7 marks]