

### Review Questions

1. List the five basic search conditions to restrict retrieved rows with the WHERE clause, and explain how they are used.
2. Explain the DATEADD and DATEDIFF commands.
3. Explain the aggregate operators COUNT, SUM, and AVG.

**EMP\_1 Table**

	EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE
▶	101	News	John	G	08-Nov-00	502
	102	Senior	David	H	12-Jul-89	501
	103	Arbough	June	E	01-Dec-96	500
	104	Ramoras	Anne	K	15-Nov-87	501
	105	Johnson	Alice	K	01-Feb-93	502
	106	Smithfield	vWilliam		22-Jun-04	500
	107	Alonzo	Maria	D	10-Oct-93	500
	108	vWashington	Ralph	B	22-Aug-91	501
	109	Smith	Larry	vW	18-Jul-97	501

Use the EMP\_1 table shown above, to answer questions 4 through 7.

4. Write the SQL code that will list all the attributes for a job code of 502.
5. Write the SQL code required to list all employees whose last names start with Smith.
6. Write the SQL code that will produce a listing for the data in descending order by the last name.
7. Write the SQL code that will list only the different job codes found in the table.

**Table name: CUSTOMER**

	CUS_CODE	CUS_LNAME	CUS_FNAME	CUS_INITIAL	CUS_AREACODE	CUS_PHONE	CUS_BALANCE
▶	10010	Ramas	Alfred	A	615	844-2573	0.00
	10011	Dunne	Leona	K	713	894-1238	0.00
	10012	Smith	Kathy	vW	615	894-2285	896.54
	10013	Olowski	Paul	F	615	894-2180	1285.19
	10014	Orlando	Myron		615	222-1672	673.21
	10015	O'Brian	Amy	B	713	442-3381	1014.56
	10016	Brown	James	G	615	297-1228	0.00
	10017	vWilliams	George		615	290-2556	0.00
	10018	Farriss	Anne	G	713	382-7185	0.00
	10019	Smith	Olette	K	615	297-3809	453.98

Use the CUSTOMER table shown above, to answer questions 8 through 10.

8. Create the SQL query that will produce a list of customers who have an unpaid balance, listing the balances in descending order by customer balances. The query should produce the result set listing below.

	CUS_LNAME	CUS_FNAME	CUS_INITIAL	CUS_BALANCE
►	Olowski	Paul	F	1285.19
	O'Brian	Amy	B	1014.56
	Smith	Kathy	W	896.54
	Orlando	Myron		673.21
	Smith	Olette	K	453.98

9. Create the SQL query that will find the average unpaid customer balance, the minimum balance, the maximum balance, and the total of the unpaid balances. The query should produce the result set listing below.

	Average Balance	Minimum Balance	Maximum Balance	Total Unpaid Bills
►	432.35	0.00	1285.19	4323.48

10. Write the query to count the number of customers with a customer balance over \$500.

### Table name: CHARTER

	CHAR_TRIP	CHAR_DATE	AC_NUMBER	CHAR_DESTINATION	CHAR_DISTANCE	CHAR_HOURS_FLOWN	CHAR_HOURS_WAIT	CHAR_FUEL_GALLONS	
►	+	10001	05-Feb-06	2289L	ATL	936.0	5.1	2.2	354.1
	+	10002	05-Feb-06	2778V	BNA	320.0	1.6	0	72.6
	+	10003	05-Feb-06	4278Y	GNV	1,574.0	7.8	0	339.8
	+	10004	06-Feb-06	1484P	STL	472.0	2.9	4.9	97.2
	+	10005	06-Feb-06	2289L	ATL	1,023.0	5.7	3.5	397.7
	+	10006	06-Feb-06	4278Y	STL	472.0	2.6	5.2	117.1
	+	10007	06-Feb-06	2778V	GNV	1,574.0	7.9	0	348.4
	+	10008	07-Feb-06	1484P	TYS	644.0	4.1	0	140.6
	+	10009	07-Feb-06	2289L	GNV	1,574.0	6.6	23.4	459.9
	+	10010	07-Feb-06	4278Y	ATL	998.0	6.2	3.2	279.7
	+	10011	07-Feb-06	1484P	BNA	352.0	1.9	5.3	66.4
	+	10012	08-Feb-06	2778V	MOB	884.0	4.8	4.2	215.1
	+	10013	08-Feb-06	4278Y	TYS	644.0	3.9	4.5	174.3
	+	10014	09-Feb-06	4278Y	ATL	936.0	6.1	2.1	302.6
	+	10015	09-Feb-06	2289L	GNV	1,645.0	6.7	0	459.5
	+	10016	09-Feb-06	2778V	MQY	312.0	1.5	0	67.2
	+	10017	10-Feb-06	1484P	STL	508.0	3.1	0	105.5
	+	10018	10-Feb-06	4278Y	TYS	644.0	3.8	4.5	167.4

11. Using the CHARTER table shown above, write the SQL query that will list the date, aircraft number, destination, distance, and hours flown for aircraft number 2778V. The query should produce the result set listing below.

	CHAR_DATE	AC_NUMBER	CHAR_DESTINATION	CHAR_DISTANCE	CHAR_HOURS_FLOWN
►	05-Feb-06	2778V	BNA	320	1.6
	06-Feb-06	2778V	GNV	1574	7.9
	08-Feb-06	2778V	MOB	884	4.8
	09-Feb-06	2778V	MQY	312	1.5

12. List the two mandatory clauses in a SELECT command.
13. Explain the logical operator AND, OR, and NOT.
14. List the four data manipulation commands, and explain their purpose.
15. In SQL Server, what are literals?