

**A3**

**Q1: How do you create a new database in Hive?**

**Answer:** To create a new database in Hive, use the command:

sql

```
CREATE DATABASE database_name;
```

For example: CREATE DATABASE flight\_info\_system;

**Q2: What command would you use to view all tables in a database?**

**Answer:** To view all tables in the current database:

sql

```
SHOW TABLES;
```

**Q3: How do you add a new column to an existing table?**

**Answer:** To add a new column to an existing table:

sql

```
ALTER TABLE table_name ADD COLUMNS (new_column_name data_type);
```

For example: ALTER TABLE flights ADD COLUMNS (aircraft\_type STRING);

**Q4: What is the difference between an internal table and an external table?**

**Answer:** When you drop an internal table, both the data and table definition are deleted. When you drop an external table, only the table definition is deleted while the data remains in its original location.

**Q5: How do you load data from a local file into a Hive table?**

**Answer:** Use the LOAD DATA command:

sql

```
LOAD DATA LOCAL INPATH 'file_path' INTO TABLE table_name;
```

For example: LOAD DATA LOCAL INPATH '/home/cloudera/2008.csv' INTO TABLE flight\_data;

**Q6: How would you calculate the average arrival delay for flights from SFO in January 2008?**

**Answer:**

sql

```
SELECT AVG(arr_delay)
```

```
FROM flight_data
```

```
WHERE year = 2008
```

```
AND month = 1
```

```
AND origin = 'SFO';
```

**Q7: How do you rename a table in Hive?**

**Answer:** Use the ALTER TABLE command:

sql

```
ALTER TABLE old_table_name RENAME TO new_table_name;
```

For example: ALTER TABLE delays RENAME TO flight\_delays;

**Q8: How do you create an index on a table column?**

**Answer:**

sql

```
CREATE INDEX index_name ON TABLE table_name (column_name)
AS 'org.apache.hadoop.hive.ql.index.compact.CompactIndexHandler'
WITH DEFERRED REBUILD;
```

**Q9: How would you join two tables in Hive?**

**Answer:**

sql

```
SELECT a.column1, b.column2
FROM table_a a
JOIN table_b b
ON a.key_column = b.key_column;
```

**Q10: How do you drop a table in Hive?**

**Answer:** To drop a table:

sql

```
DROP TABLE table_name;
```

Or if you want to check if it exists first:

sql

```
DROP TABLE IF EXISTS table_name;
```