**Application design**

1. **How to scale the application for 1M records?**

To scale the application for 1M records we can use :

* Database like MySQL.
* Always have caching so that frequently queried data can be fetched easily.
* Distributed systems to handle large set of data.
* Always filter the data before use.

1. **How to structure a database without using csv?**

To structure a database without using csv we can use relational database. Create a database with tables. Define columns, data types and primary key.

|  |  |  |
| --- | --- | --- |
| **S No** | **Columns** | **Data Type** |
| 1 | lease\_id | Id, primary key |
| 2 | company\_name | Varchar(30) |
| 3 | address1 | Varchar(100) |
| 4 | suite | Varchar(40) |
| 5 | city | Varchar(30) |
| 6 | state | Varchar(5) |
| 7 | postal\_code | Int |
| 8 | rent\_montly | Int or decimal |
| 9 | lease\_start | Date |
| 10 | lease\_end | Date |
| 11 | space\_size | Int |
| 12 | renewal\_option | Varchar(5) |

Insert data into it and start querying.