Department of Computer Engineering Exp. No.10

Semester	T.E. Semester VI – Computer Engineering
Subject	Data Warehousing and Mining
Subject Professor In-charge	Prof. Kavita Shirsat
Assisting Teachers	Prof. Kavita Shirsat
Laboratory	M-312B

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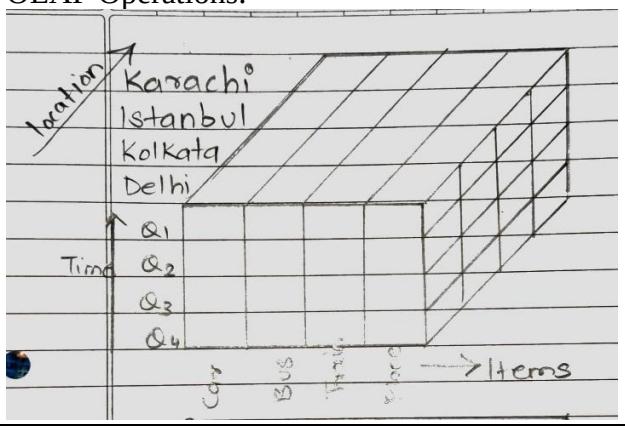
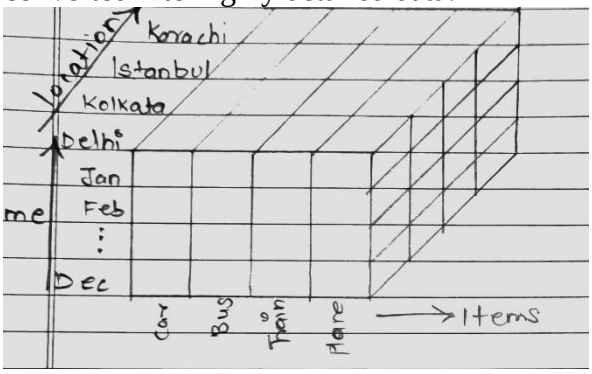
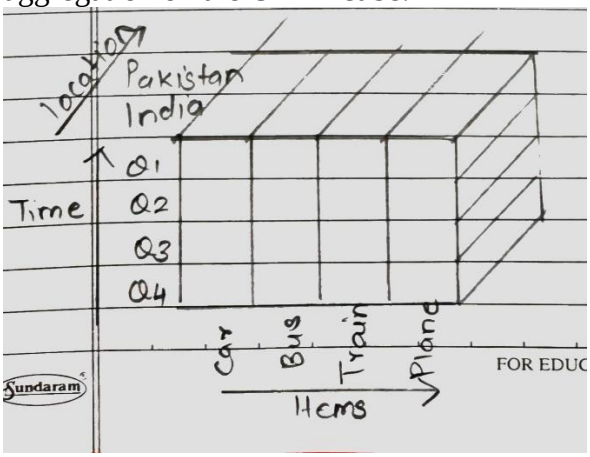
Grade and Subject Teacher's Signature		

Experiment Number	10	
Experiment Title	Perform OLAP operations on dimensional model.	
Resources / Apparatus Required	Hardware: Computer system	Software: SQL-PostgreSQL
Description: -	OLAP stands for Online Analytical Processing Server. It is a software technology that allows users to analyze information from multiple database systems at the same time. It is based on multidimensional data model and allows the user to query on multi-dimensional data (eg. Delhi -> 2018 -> Sales data).	
Implementation: -	OLAP Operations: 	

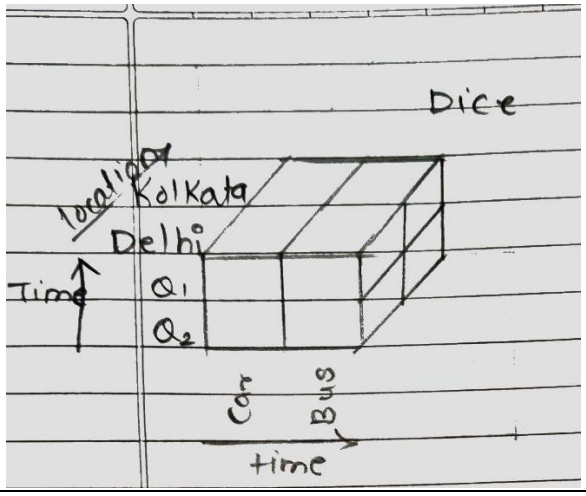
1. Drill Down: In drill-down operation, the less detailed data is converted into highly detailed data.

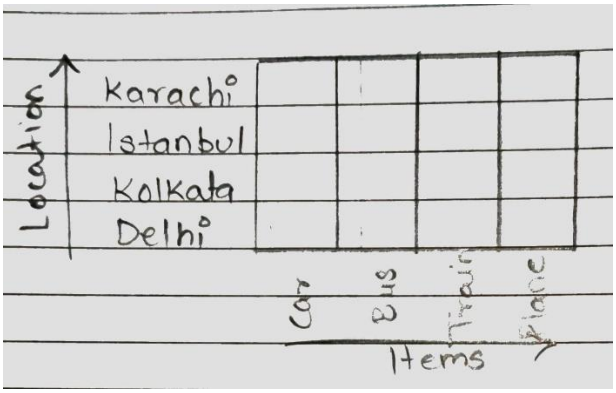
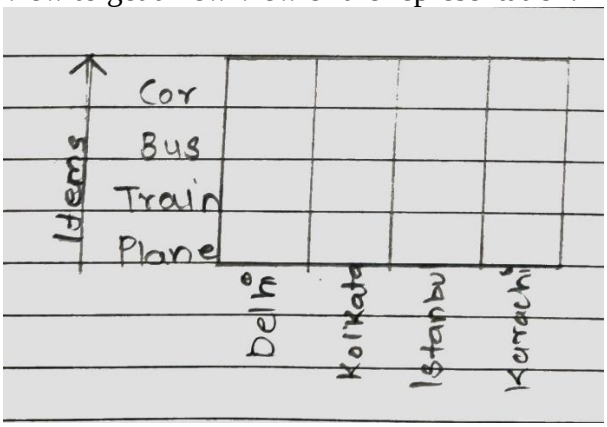


2. Roll Up: It is just opposite of the drill-down operation. It performs aggregation on the OLAP cube.



3. Dice: It selects a sub-cube from the OLAP cube by selecting two or more dimensions.



	4. Slice: It selects a single dimension from the OLAP cube which results in a new sub-cube creation.  5. Pivot: It is also known as rotation operation as it rotates the current view to get a new view of the representation. 
Conclusion: -	Hence, there exists 5 OLAP operations in total. All five operations have been executed above. The data set is a multi-dimensional dataset. These operations are used to analyze multiple data set at the same time from different tables.