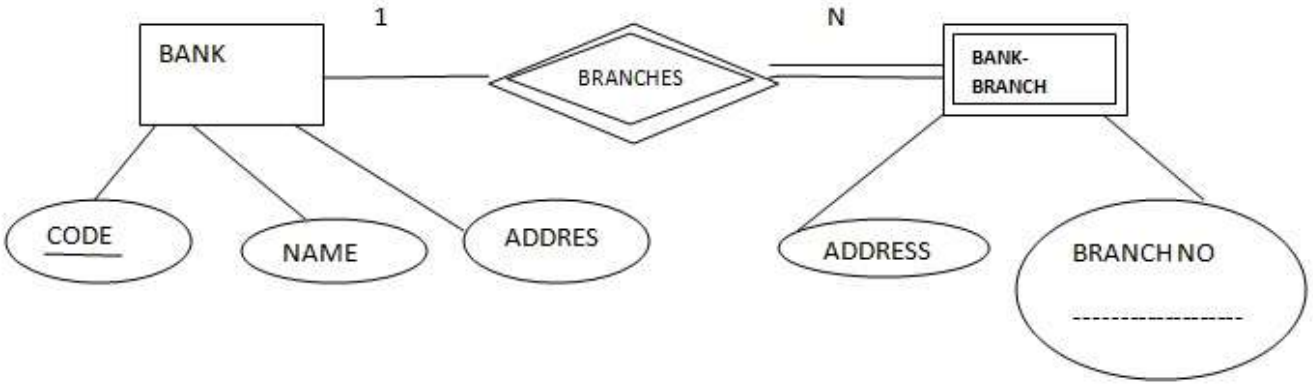
DBMS ASSIGNMENT QUESTIONS

UNIT-1 INTRODUCTORY CONCEPTS OF DBMS

Q.1 Which database is used in Google? How many servers does Google own?

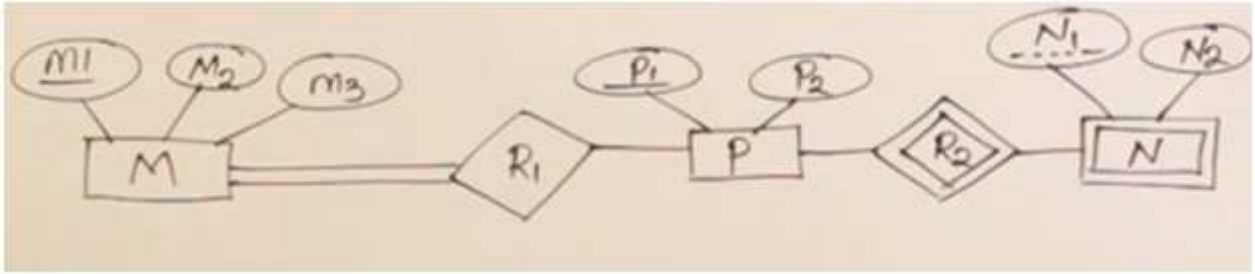
Q.2 When was the first database invented? Name the best five databases name used by the companies with their limitations?

Q.3 Consider an ER diagram given below for Bank database.



In the above diagram, tell us which is the weak entity, primary key , relationship type and what does the double line indicates ?

Q.4 Consider the given ER Model



What is the minimum number of table needed in the above E-R Diagram? Explain the process in detail with tables?

Q.5 Let E1 and E2 be two entities in an ER diagram with simple single-valued attributes. R1 and R2 are two relationships between E1 and E2, where R1 is one-to-many and R2 is many-to-many. R1 and R2 do not have any attributes of their own. What is the minimum number of tables required to represent this situation in the relational model?

Q.6 The following table has two attributes A and C where A is the primary key and C is the foreign key referencing A with on-delete cascade.

A C

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2 4

3 4

4 3

5 2

7 2

9 5

6 4

The set of all tuples that must be additionally deleted to preserve referential integrity when the tuple (2,4) is deleted is?

Q.7 Suppose students are going to a college to take an admission in particular course let's suppose BTech and one said that I will we choosing ME , so here BTech is general but the branch in which they want to enrol is a specialisation . Show this in the form of diagram showing the difference between generalization and specialization.

Q.8

Consider the following entity relationship diagram (ERD), where two entities E1 and E2 have a relation R of cardinality 1 : m.

The attributes of E1 are A11, A12 and A13 where A11 is the key attribute. The attributes of E2 are A21, A22 and A23 where A21 is the key attribute and A23 is a multi-valued attribute.Relation R does not have any attribute. A relational database containing minimum number of tables with each table satisfying the requirements of the third normal form (3NF) is designed from the above ERD.The number of tables in the database is