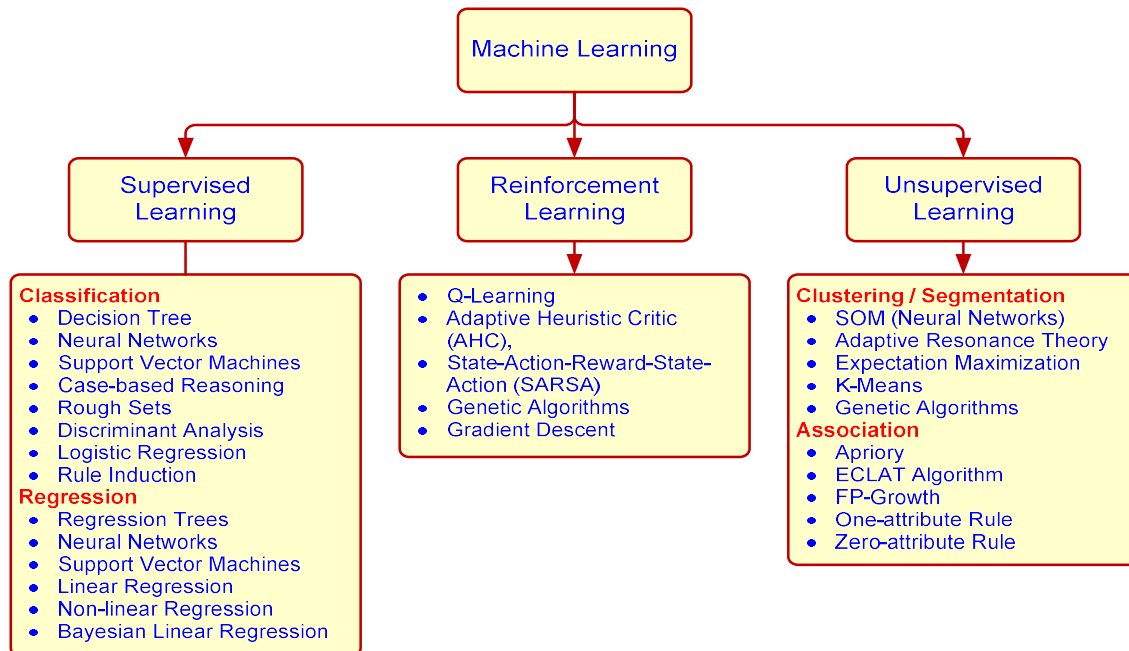


Q1 compare

a) Machine learning methods



b) CBR vs Rule based Reasoning

Criterion	Rule-Based Reasoning	Case-Based Reasoning
Knowledge unit	Rule	Case
Granularity	Fine	Coarse
Explanation mechanism	Backtrack of rule firings	Precedent cases
Advantages	Flexible use of knowledge Potentially optimal answers	Rapid knowledge acquisition Explanation by examples
Disadvantages	Possible errors due to misfit rules and problem parameters Black-box answers	Suboptimal solutions Redundant knowledge base Computationally expensive

c) DBMS vs Data mining



DBMS and Data Mining

	DBMS	Data Mining
Task	Extraction of detailed and summary data	Knowledge discovery of hidden patterns and insights
Type of result	Information	Insight and Prediction
Method	Deduction (Ask the question, verify with data)	Induction (Build the model, apply it to new data, get the result)
Example question	Who purchased mutual funds in the last 3 years?	Who will buy a mutual fund in the next 6 months and why?

5-7

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d) Data mart vs data warehouse

Data warehouse:

- The data warehouse is a collection of integrated, subject-oriented databases designed to support DSS functions, where each unit of data is non-volatile and relevant to some moment in time”

Data Mart :

- Datamart is subset of data warehouse
- A departmental small-scale “DW” that stores only limited/relevant data

■ **Dependent data mart**

A subset that is created directly from a data warehouse

■ **Independent data mart**

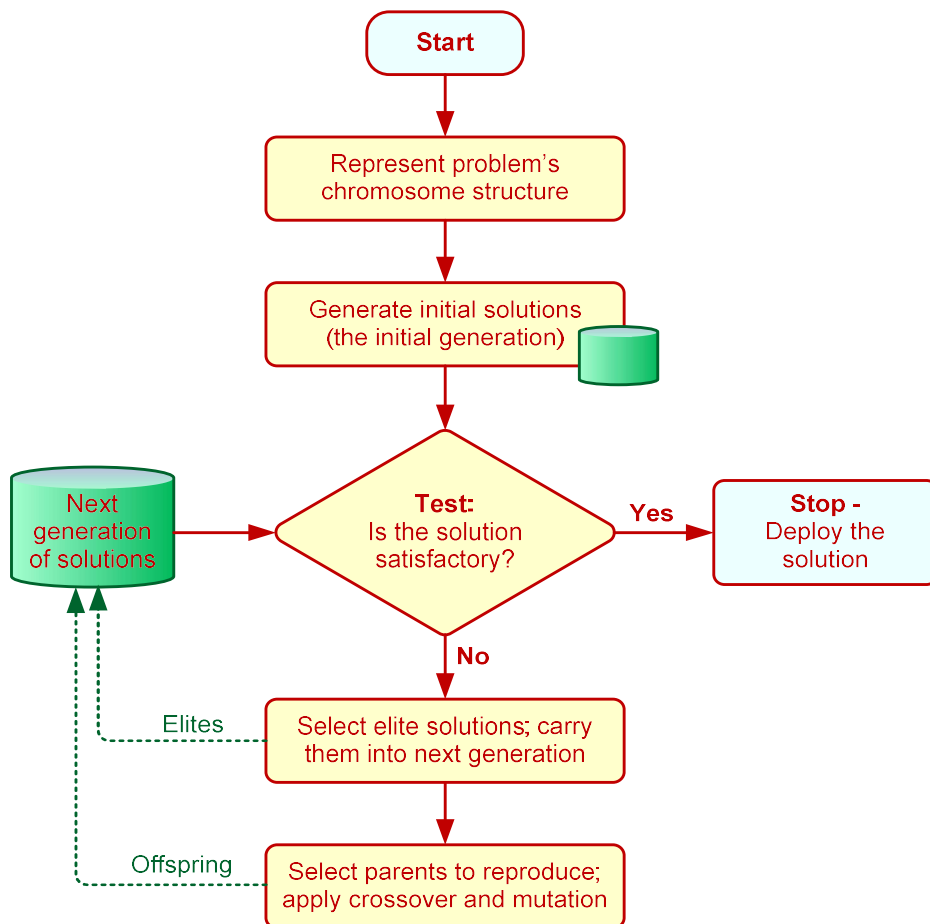
A small data warehouse designed for a strategic business unit or a department

Q2 match :

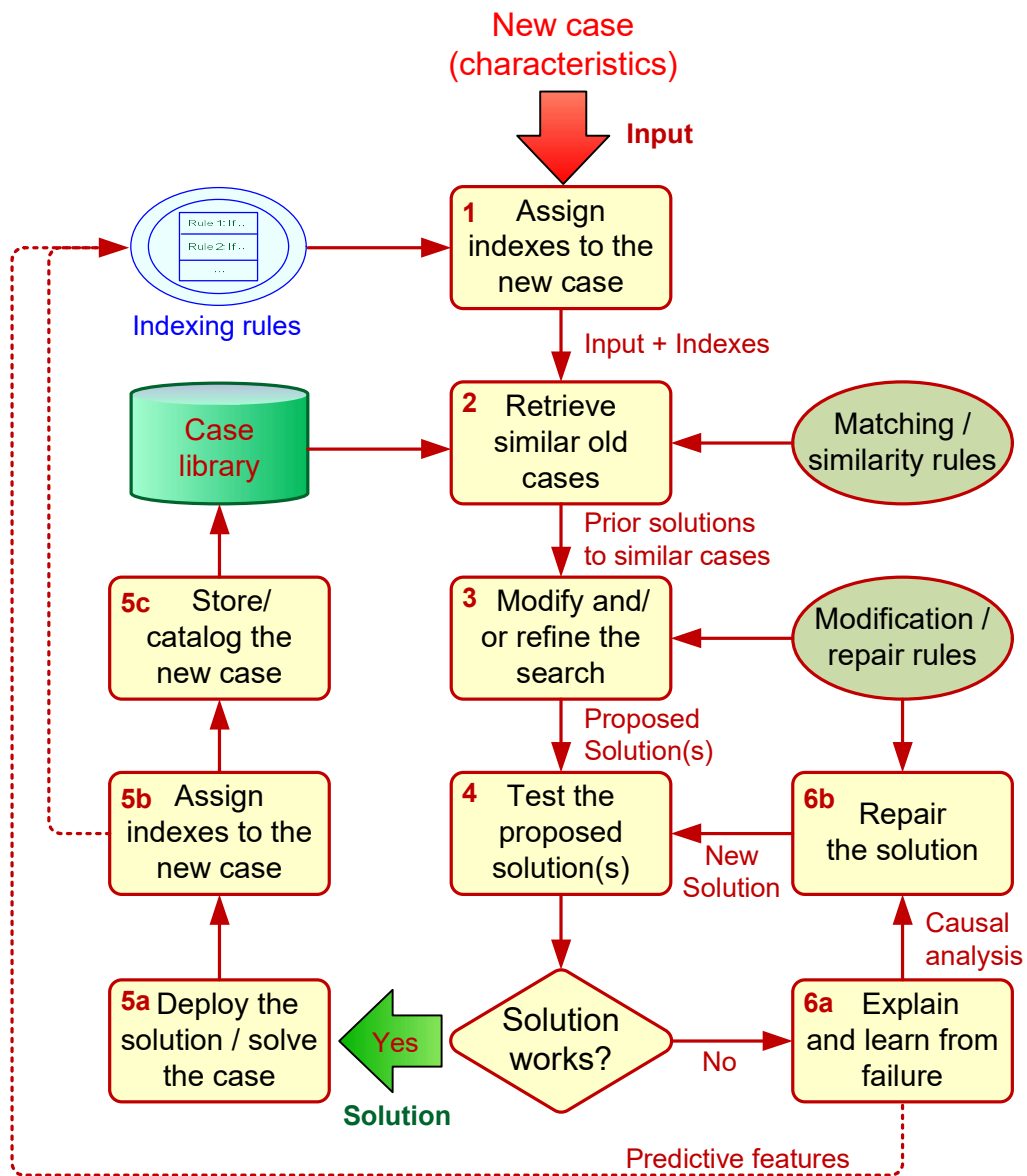
- 1- J
- 2- I
- 3- H
- 4- G
- 5- F
- 6- E
- 7- D
- 8- C
- 9- B
- 10- A

Q3 Draw

- 1- BIG data (Unknown)
- 2- GA (Genetic Algorithm) Operators algorithm



3- Case-Based Reasoning (CBR) process algorithm



Q3 T or F :

1- T

2- T

3- F

4- T

5- T

6- T

7- F

8- T

9- T

10-T