**Final 2018 second semester**

1. **Define DSS and BI. Explain BI Architecture component. (Chapter 1)**

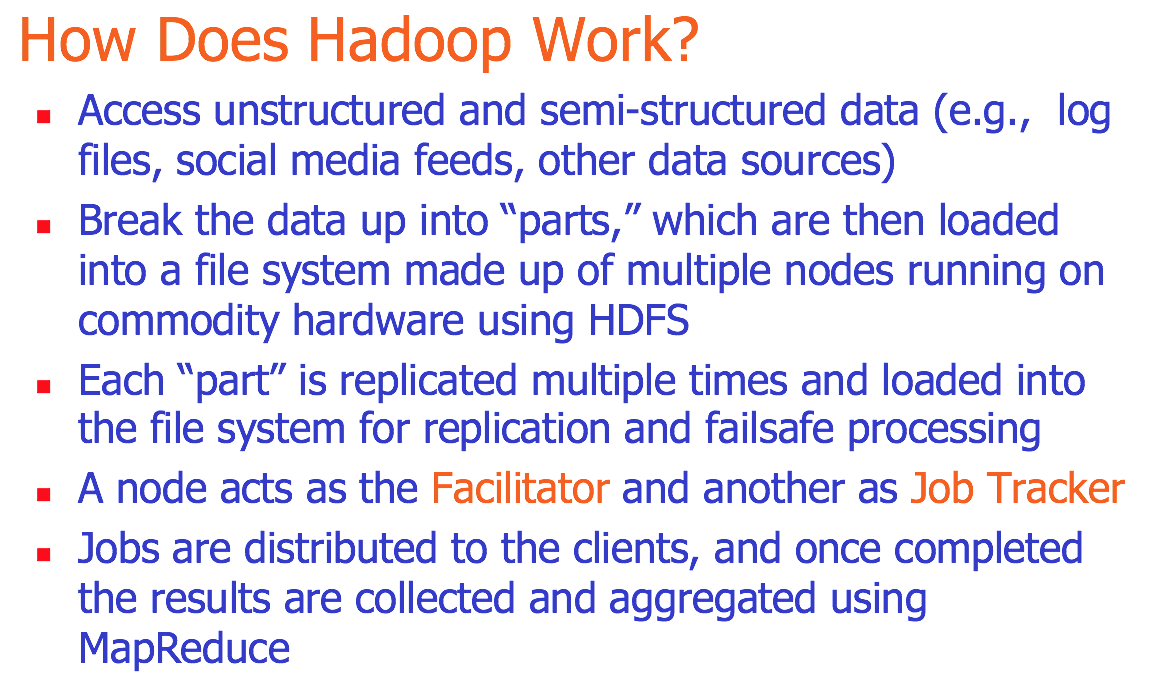
* **DSS -** interactive computer-based systems, which help decision makers utilize data and models to solve unstructured problems.
* **BI -** is an umbrella term that combines architectures, tools, databases, analytical tools, applications, and methodologies

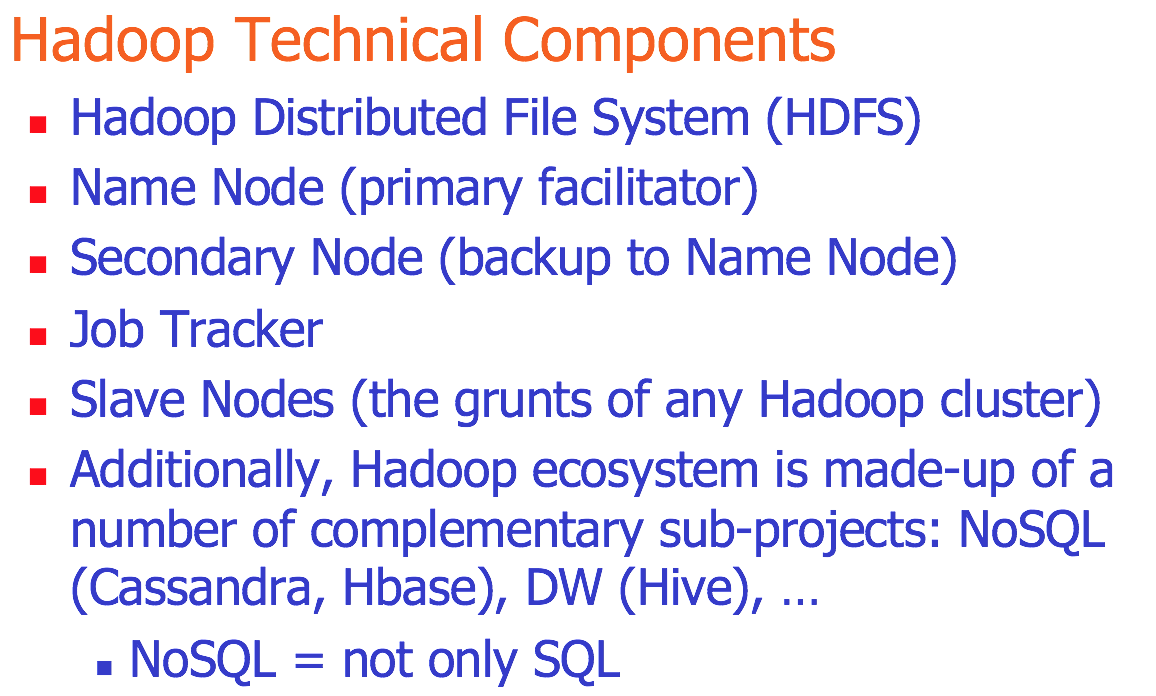
**BI system has four major components:**

* 1. a data warehouse, with its source data
  2. business analytics, a collection of tools for manipulating, mining, and analyzing the data in the data warehouse
  3. business performance management (BPM) for monitoring and analyzing performance
  4. a user interface (e.g., dashboard)

1. **What is Hadoop? how it’s work and what its technical component? (Chapter 13)**

**Hadoop** is an open source framework for storing and analyzing massive amounts of distributed, unstructured data.





1. **List 5 types of specialized charts and graphs. (Chapter 4)**

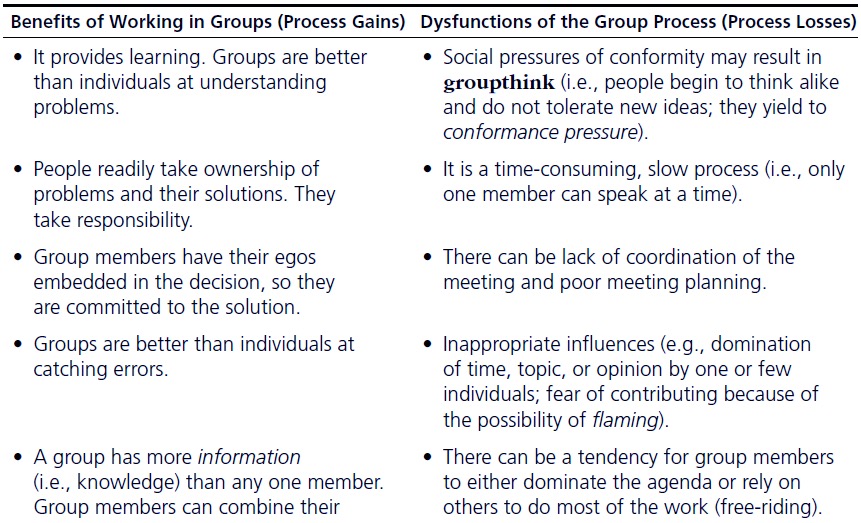
* Histogram
* Gantt Chart
* PERT Chart
* Geographic Map
* Bullet Graph
* Heat Map / Tree Map
* Highlight Table

1. **List 3 terms of how decision makers think and react to problem. And list 3 of decision management styles. (Chapter 2)** 
   1. The way they perceive the problem.
   2. Their cognitive response.
   3. how values and beliefs vary from individual to individual and from situation to situation.

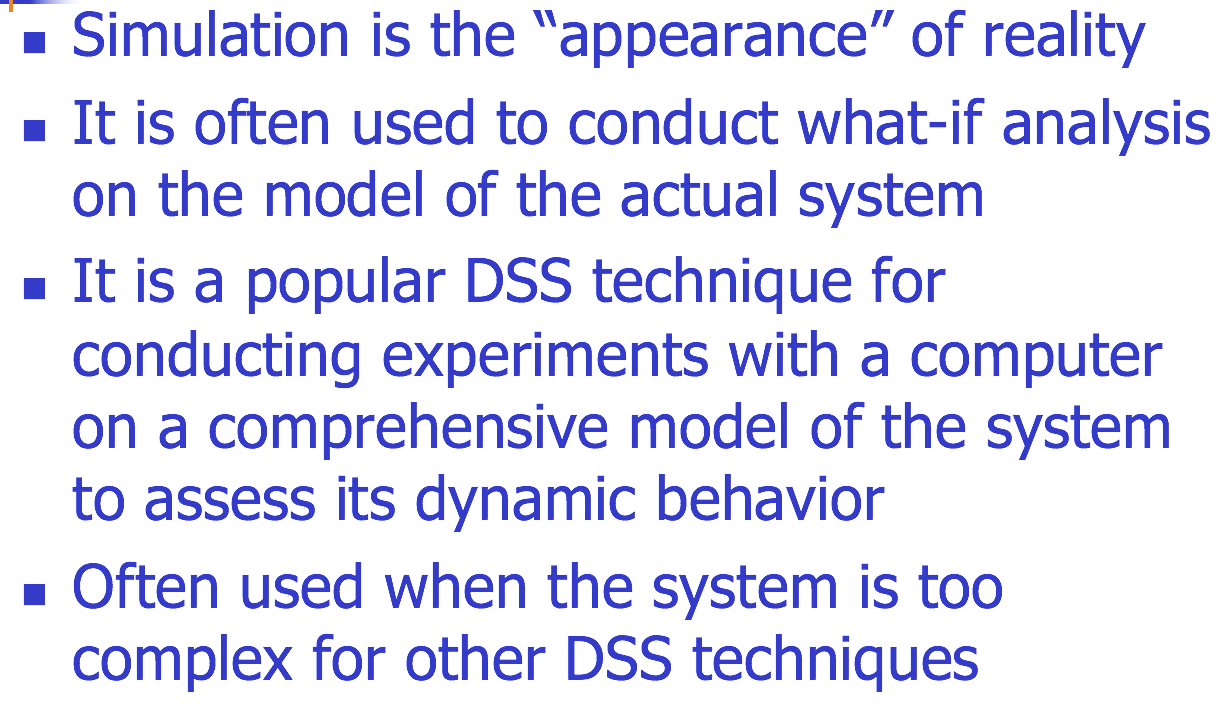
**Decision-making styles**

* 1. Heuristic versus Analytic
  2. Autocratic versus Democratic
  3. Consultative (with individuals or groups)

1. **Give 2 advantages of working in group and 2 disadvantages. (Chapter 12)**



1. **Define: simulation and mention its benefits. (Chapter 10)**



**Advantages of simulation:**

* The theory is fairly straightforward.
* Great deal of time compression
* Experiment with different alternatives
* The model reflects manager’s perspective
* Can handle wide variety of problem types
* Can include the real complexities of problems
* Produces important performance measures
* Often it is the only DSS modeling tool for non-structured problems

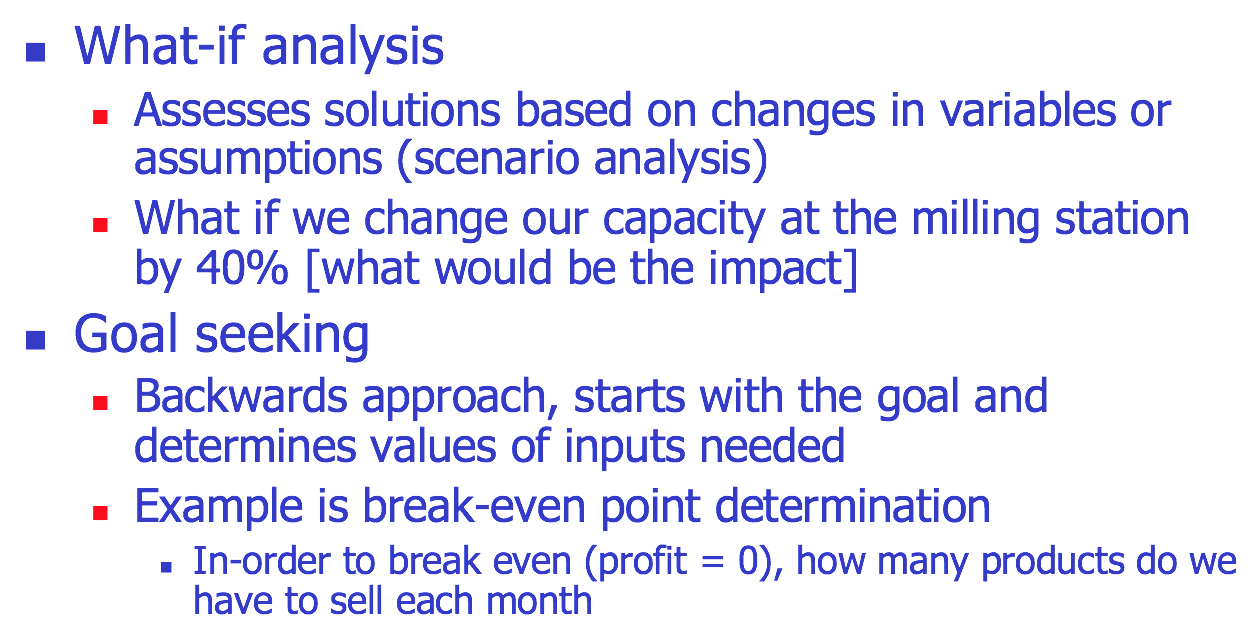
1. **Define Heuristic and when to use it. (chapter 10)**

**Heuristics** are the informal, judgmental knowledge of an application area that constitute the rules of good judgment in the field.

**When to Use Heuristics?**

* Inexact or limited input data
* Complex reality
* Reliable, exact algorithm not available
* Computation time excessive
* For making quick decisions

1. **Compare what if analysis and goal seeking? (Chapter 9)**



1. **Define NLP? What its challenges? (Chapter 7)**

**NLP is …**

a very important concept in text mining

a subfield of artificial intelligence and computational linguistics

the studies of "understanding" the natural human language

**Challenges in NLP**

* + - Part-of-speech tagging
    - Text segmentation
    - Word sense disambiguation
    - Syntax ambiguity
    - Imperfect or irregular input
    - Speech acts

1. **فيه سؤال ما اذكره عن ETL. (Chapter 3)**