1. **Relational Database** 
   * 1. Database ==> Tables ==> Records ==> Fields
   1. **Tables**
      1. Store Data
   2. **Forms**
      1. Input Data
   3. **Queries**
      1. Sort/extract
   4. **Report**
      1. Print information
   5. **Macro**
      1. Simple programming
   6. **Modules**
      1. VBA – Visual Basic for Applications
2. **Psuedo code**
   * 1. **Fake Code**
        1. Help people read code

**Definition:**

LAN- Group of interconnected Nodes wired - 802.3, wireless – 802.11

WAN- Group of Interconnected Networks

PAN – Proximity Area Network, Bluetooth

BAN – Body Area Network, 802.15

CAN – Campus Area Network

MAN – Metropolitan Area Network

HAN – Home Area Network

Hacker/ White Hat Hacker - good intent

Cracker/Black Hat Hacker – malicious intent

Script Kitty – unskilled cracker

**Random Notes:**

Internet is the largest WAN

WEB is the global connection of the internet.

Cloud is essentially someone else’s computer.

ATX is a size of a motherboard

2^b = combinations of binary

8bit process = 256 possible combinations.

16bit process = 65,536 possible combinations.

24bit process = 16.7 million possible combinations.

32bit process = 4.3billon possible combinations.

Email etiquette

1. Always consider mail public. Do not Misleading or offensive terms in a signature line
2. Don’t shout (caps lock)
3. Be concise and to the point
4. Use proper grammar
5. Do not forward chain letters
6. Do not request delivery and read receipts
7. Don’t ask to recall a message
8. Take a second look before you send

Different Topographies

1. Bus
2. Token Ring
3. Star – star bus or star ring
4. Mesh – fully and partially mesh

Architecture

1. Peer to Peer
2. Client

Hub is a dumb switch. Repeater

Switch directs traffics using MAC.

Class of Networks :

A : 1-126 N = 8

B: 128-191 N = 16

C: 102-223 N = 24

N = Class

S = WAC – N

H = 32 – WAC

Gateways:

128 – 1 0 0 0 0 0 0 0

192 – 1 1 0 0 0 0 0 0

224 – 1 1 1 0 0 0 0 0

240 – 1 1 1 1 0 0 0 0

248 – 1 1 1 1 1 0 0 0

252 – 1 1 1 1 1 1 0 0

254 – 1 1 1 1 1 1 1 0

255 – 1 1 1 1 1 1 1 1