Module A.2 Level 2 Answers

* The first CPU chip 8086
  + made by Intel
  + released in July 1976
  + contained DNA which is at the centre of a computer
* integrated circuit is an electronic circuit formed on a small piece of semiconducting material
  + same function as a larger circuit
  + made from discrete components
* Before ICs
  + computers were made using vacuum tubes and solid state devices such as the transistor
* Core Memory
  + described as tiny donuts made of magnetic material strung on wires into an array
    - Each one of the donuts was a bit, magnetized one way for “zero” and the other way for “one”
    - wires could detect and change the magnetization
* Random Access Memory (RAM)
  + long in shape and is much more advance
  + evolved and become better in technology
* Moore’s law
  + refers to an observation made by Intel co-founder Gorden Moore in 1965
    - noticed that the number of transistors per square inch on integrated circuits has doubled every year since their innovation”
* RAM follows the Moore’s law
  + gradually slowing down the doubling if integrated circuits.
* RAM is the physical hardware inside a motherboard
  + Hard disks are external and not inside the motherboard.
* VGA
  + display hardware as well as a cable
  + They utilize an HD15 connector (male of female depending on the equipment being attached) to connect the monitor and laptop/PC
  + was introduced in 1987
  + VGA hardware is a chip like card
* Before VGA, there were green screen monitors that produced graphics
* 3D graphics were introduced in 1976
  + S3 Virge
    - One of the first 3D graphic cards
    - had many different parts and features
  + They were a bit complex
* The performance of graphic cards has changed a lot over the years
  + Before, only displayed rows of characters
  + Now, render photorealistic scenes in real-time
  + appearance and designs of graphics cards have also evolved over time and experienced radical changes