Module A.2 – Level 1 Answers

1. a.

* first electronic computers were ENIAC and UNIVAC
  + made by John W. Mauchly and J. Presper Eckert
  + Contained Vacuum Tubes
  + Contained Transistors
  + Contained Integrated circuit or chips
  + Made and used in 1940s - 1950s
* first IBM series
  + introduced in 1960s
  + had smaller, more reliable transistors
  + demand was high (more than 12 000)
  + by mid 60s
    - half of computers were IBM
* store data pertaining to client records, domestic operations and other vital processing information
* mainframes provided the **only** acceptable means of handling the data processing requirements of a large business
* large bank with numerous branches may have a mainframe computer in its central headquarters and linking terminals located in each of its branches
* Control Data Corporation (CDC) 6600
  + First super computer
  + Had a single CPU
  + size of four filing cabinets
  + $8 million to around $60 million
  + operated at up to 40MHz
* a computer that is millions of times faster than and regular desktop PC
* capable of crunching the world’s most difficult scientific problems
* The CRAY computer came out back in 1972
  + Seymour Cray founded Cray Research
  + First CRAY system was installed at Los Alamos National Laboratory in 1976
  + cost 8.8 million dollars
  + was made in a C shape
    - integrated circuits could be placed closer together
  + Max length of wire was four feet long
  + Developed an innovative refrigerator system using Freon to handle the intense heat the computer generated
  + After a lot of hard work and research, IBM created a massively parallel and networking computer called Deep Blue
  + won a chess tournament
* Quantum computing takes advantage of the unusual ability of subatomic particles to exist in more than one state at any time. Due to the way the smallest of particles act and behave, operations can be done much more quickly and use less energy than classical computers
* the IBM 5100 Portable Computer
  + was released in September 1975
  + first IBM PPC
  + weighed about 50 pounds
* The IBM 5100
  + comparable to the IBM 1130 in performance and storage capacity but almost as small and easy to use like as an IBM 5110 and 5120 Typewriter.
* Other PCs before the IBM PC were available as early as the mid-1970s
  + they were do-it-yourself kits
  + later on, they were sold as off-the-shelf products
* The Altair
  + First PC to grab a lot of attention
  + designed by Ed Roberts
  + launched as the cover story of Popular Electronics magazine in January 1975
* Apple I
  + First apple computer
  + introduced on April 11, 1976
  + different from the PC
    - had a typewriter-like keyboard
    - had the ability to connect to a regular TV as a screen
* Modern computers are now more efficient, save space, are faster, and are gradually changing our lifestyle.