What was von Neumann's stored program concept?

In 1945, John von Neumann, noting that instructions are pieces of information just like data, proposed a new computer architecture where instructions and data are stored next to one another. This is known as the *stored-program* concept. All modern computers are stored-program computers.

Define the following terms:

bit - Fundamental unit of a modern computer, it is the binary digit or bit. Bit is either on (1) or off (0).

byte – Fundamental addressable unit of RAM is byte, one byte consists of 2 nibbles. Each nibble is 4 bits. One byte can store 256 (2^8) possible values in the form of a string.

nibble – A combination of 4 bits(2^4)

word – A word the natural size of the execution environment. A word is made up of an integral number of bytes and is usually the size of the CPU’s general registers. The size of a word may vary from CPU to CPU.

register – The internal memory of the CPU, it holds new and used data from ALU and FPA. Registers are volatile, meaning they lose data when turned off

alu – Arithmetic and logic unit, it performs operations on binary numbers

List two differences between primary and secondary memory?

Primary memory is faster but more expense, whereas secondary memory is cheaper but slower.