**Activity two Questions**

1. Explain Computer Architecture.

* The computer is made up of 4 main components and 3 buses, they are as follows
* Clock
* Processor
* Memory (RAM/ROM)
* I/O Devices
* Data bus, Address bus and Control bus

1. What are control register and status register?

* Control register handles the behavior of the CPU by controlling interrupts, switching the addressing modes, paging and coprocessor control

1. Explain three types of buses.

* Data bus – used to transmit data from one point to the next
* Address bus – points to the address location from the chip which is to be used
* Control bus – Signals mainly from the processor to control the rest of the system

1. Explain FDE cycle.

* The processor fetches the instructions from memory
* Special registers called Program Counter or Instruction Pointer points to the address of the next inscription
* The fetched instruction is then executed

1. What are MIPS instructions?

* MIPS instructions have 5 steps and is as follows.
* IF – Fetch Instructions
* ID – Decode the instructions
* EX – Execute the instructions
* MEM – Read / write the data to memory
* WB – Write back / store the result in register destination

1. Explain three levels of cache memory.

* Level 1 (L1) – Part of the CPU chip and is the smallest and fastest to access, size is restricted between 8 and 64KB
* Level 2 (L2) – Slightly bigger than L1 and is built into the CPU with L1. Takes a bit longer to access than L1
* Level 3 (L3) – same as L2. L2 and L3 cache maybe shared while each CPU has its own L1 cache.

1. What is process?

* Process is an instance of a program in execution.

1. What are threads?

* A small part of the process or a subprocess of a process in execution

1. What is program counter?

* Program counter holds the register address for the next instruction to be executed.

1. Explain stack memory?

* First in Last out (Fi-Lo) memory. Used to store dynamic data.