

## Research work 1

### 1. What is boot process and BIOS

In computing, booting is the process of starting a computer as initiated via hardware such as a button or by a software command. After it is switched on, a computer's central processing unit (CPU) has no software in its main memory, so some process must load software into memory before it can be executed.

BIOS-

BIOS, or Basic Input/Output System, is the built-in core processor software responsible for booting up your system. Typically embedded into your computer as a motherboard chip, the BIOS functions as a catalyst for PC functionality action.

### 2. What is OS –

An operating system (OS) is system software that manages computer hardware, software resources, and provides common services for computer programs. And it is a software that acts as an interface between computer hardware components and the user.

### 3. What is SBC and give 5 examples

single-board computer (SBC) is a complete computer built on a single circuit board, with microprocessor(s), memory, input/output (I/O) and other features. It combines the high-performance processing and leading-edge system I/O capabilities of COMs with the modular expansion flexibility.

1. PC/104
2. DOS computers
3. Linux microcontrollers
4. programmable x86 controllers
5. cubie board
6. MK 805

### 4. SOC Used in raspberry pi

Broadcom BCM2711 SOC with 1.5hz, 64 bit quad-core ARM cortex processor

### 5. What is real time OS-

A real-time operating system (RTOS) is an OS that guarantees real-time applications a certain capability within a specified deadline.