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**EMBEDDED LINUX ON ARM(ESCU2050)**

**Assignment3**

Short questions

1. what is a device driver?
2. What is the role of a device driver?
3. Name two programming languages commonly used to develop device drivers.
4. True or False: Device drivers are specific to a particular operating system.
5. What is plug-and-play in the context of device drivers?
6. What is an interrupt handler in a device driver?
7. Give an example of a common type of device driver.
8. Name one advantage of using device drivers.
9. Which component of the operating system loads device drivers during system startup?
10. Define device abstraction in the context of device drivers.
11. What is the difference between a device driver and firmware?
12. What are the main components of a device driver?
13. What is the purpose of device driver signing?
14. How does a device driver handle device conflicts?
15. What is DMA (Direct Memory Access) in the context of device drivers?

Long questions

1. What is the significance of I/O ports and memory addresses in device drivers?
2. How does a device driver communicate with a hardware device?
3. What is the role of the IOCTL (Input/Output Control) interface in a device driver?
4. Explain the concept of interrupt-driven I/O in device drivers.
5. What are the steps involved in installing a device driver in an operating system?