Quiz Questions – Embedded Linux

Lecture 2:

Question 1 – “The bootloader is a piece of software responsible for…”

1. Providing all the services to manage the hardware resources
2. **Setting-up the hardware to run the operating system**
3. Implementing the functionalities to be delivered to the embedded system user
4. Storing the Linux Kernel Configuration files, the system programs, and the application

Question 2 – “In the ‘Reference Hardware Model’, which component is responsible for volatile memory?”

1. Boot Flash
2. Mass Memory Flash
3. **RAM**
4. CPU

Question 3 – “The Linux kernel is split into…”

1. **Two layers: User space and kernel space**
2. Two layers: Developer space and user space
3. Three layers: OS, hardware, and software

Question 4 – “Which of the following are methods for informing the kernel of which resources are available in the embedded system?”

1. Get the kernel to look it up online
2. **Using a device tree blob**
3. Look it up in a memory map
4. **Hardcode it into the kernel binary code**

Question 5 – “What produces a device tree blob (DTB) file?”

1. Device Tree Origin
2. **Device Tree Source**
3. Device Tree Generation
4. Device Tree

Question 6 – “In regard to the bootloader – at power-up, the program counter is set to a default value, known as the…”

1. Default vector
2. Initial vector
3. Primary vector
4. **Reset vector**

Question 7 – “A bootloader operation carried out at the power-up stage is…”

1. **Begins executing software from the reset vector**
2. Preloading the boot flash with the bootloader
3. Jumping to the first instruction of the operating system
4. Preloading the mass memory flash with the device tree