

Resource Management

System Resources

6.1.1 Identify the resources that need to be managed within a computer system.

1. List 5 resources that need to be managed within a computer system.

6.1.2 Evaluate the resources available in a variety of computer systems.

2. What is the main difference between a supercomputer and a mainframe?
3. Evaluate the resources available in at least two of the computer systems listed.

6.1.3 Identify the limitations of a range of resources in a specified computer system.

4. Identify the limitations of a range of resources for at least two of the computer systems listed in 6.1.2.

6.1.4 Describe the possible problems resulting from the limitations in the resources in a computer system.

5. Describe two possible problems resulting from the limitations in the resources in a computer system.

Operating System

6.1.5 Explain the role of the operating system in terms of managing memory, peripherals and hardware interfaces.

6. Explain the role of the operating system in terms of managing the processor, memory, peripherals, and user interface.
 - a. Processor Management

 - b. Memory Management

 - c. Peripheral Management

 - d. User Interface

6.1.7 Outline OS resource management techniques: scheduling, policies, multitasking, virtual memory, paging, interrupt, polling.

7. Outline OS resource management techniques: scheduling, policies, multitasking, virtual memory, paging, interrupt, and polling.

a. Scheduling

b. Policies

c. Multitasking

d. Virtual Memory

e. Paging

f. Interrupt

g. Polling

6.1.8 Discuss the advantages of producing a dedicated operating system for a device.

8. Discuss the advantages of producing a dedicated operating system for a device in terms of its size, cost, and customization.

6.1.9 Outline how an operating system hides the complexity of the hardware from users and applications.

9. Outline how an operating system hides the complexity of the hardware from users and applications.