#### Assignment

1) SDLC Overview - Create a one-page infographic that outlines the SDLC phases (Requirements, Design, Implementation, Testing, Deployment), highlighting the importance of each phase and how they interconnect.

Answer: Software Development Life Cycle (SDLC)

# 1. Requirements Phase:

Importance: Defines what needs to be built and the expectations of stakeholders. Interconnects: Provides the foundation for all subsequent phases, guiding design, implementation, testing, and deployment.

# 2. Design Phase:

Importance: Translates requirements into a detailed blueprint for development. Interconnects: Bridges the gap between requirements and implementation, ensuring alignment with stakeholders' needs.

# 3. Implementation Phase:

Importance: Involves actual coding and development of the software.

Interconnects: Executes the design plan, turning conceptual ideas into tangible products or features.

# 4. Testing Phase:

Importance: Verifies the functionality and quality of the software.

Interconnects: Identifies and rectifies any defects or discrepancies before deployment, ensuring a robust final product.

# 5. Deployment Phase:

Importance: Releases the software for use by end-users. Interconnects: Marks the culmination of the SDLC, delivering the finished product while supporting ongoing maintenance and updates.

# **Overall Interconnection:**

Each phase builds upon the previous one, forming a cohesive process that ensures a systematic approach to software development.

Feedback loops and iterations occur throughout the SDLC, allowing for adjustments based on evolving requirements and discoveries.