* MCQ
* What does SDLC stand for?
  + A) System Development Language and Code
  + B) Software Development Life Cycle
  + C) Systematic Deployment and Logical Configuration
  + D) Software Design and Lifecycle Control
* Which phase of the SDLC involves gathering and defining the project requirements?
  + A) Design
  + B) Testing
  + C) Planning
  + D) Requirement Analysis
* What is the purpose of the "Design" phase in the SDLC?
  + A) To gather and document project requirements
  + B) To implement the system based on the specified requirements
  + C) To design the overall system architecture and detailed specifications
  + D) To validate that the system meets the specified requirements
* Which SDLC model is known for its sequential and linear approach, where each phase must be completed before the next one begins?
  + A) Waterfall Model
  + B) Agile Model
  + C) Spiral Model
  + D) V-Model
* In which SDLC model is the development process divided into small iterations, with each iteration delivering a portion of the software features?
  + A) Waterfall Model
  + B) Agile Model
  + C) Spiral Model
  + D) V-Model
* Which SDLC phase involves actual coding of the software?
  + A) Testing
  + B) Implementation
  + C) Design
  + D) Maintenance
* What is the primary focus of the "Testing" phase in the SDLC?
  + A) Code development
  + B) System design
  + C) Identifying and fixing defects
  + D) Requirement gathering
* Which SDLC phase involves the deployment of the software to a live environment?
  + A) Maintenance
  + B) Testing
  + C) Implementation
  + D) Design
* What is the main goal of the "Maintenance" phase in the SDLC?
  + A) Develop new features
  + B) Fix defects and enhance the system
  + C) Test the software
  + D) Gather project requirements
* Which SDLC model is suitable for large, complex projects where requirements are not well understood initially, and the development process is iterative?
  + A) Waterfall Model
  + B) Agile Model
  + C) Spiral Model
  + D) V-Model
* What is the primary goal of DevOps?
  + A) Faster development only
  + B) Efficient collaboration between development and operations
  + C) Only automation of manual processes
  + D) Strict separation of development and operations teams
* What does CI/CD stand for in the context of DevOps?
  + A) Continuous Integration/Continuous Deployment
  + B) Complete Integration/Complete Deployment
  + C) Continuous Interaction/Continuous Development
  + D) Centralized Integration/Centralized Deployment
* Which of the following is a key principle of DevOps?
  + A) Siloed teams and departments
  + B) Manual and isolated processes
  + C) Automation and collaboration
  + D) Slow and infrequent releases
* What is the purpose of version control systems in DevOps?
  + A) To control access to production servers
  + B) To manage and track changes to source code
  + C) To automate database schema changes
  + D) To monitor server performance
* What is the role of containers in DevOps?
  + A) To store large amounts of data
  + B) To isolate and package applications and their dependencies
  + C) To replace virtual machines entirely
  + D) To manage network configurations
* Which term is used to describe the practice of treating infrastructure as code?
  + A) Scripted Infrastructure
  + B) Manual Configuration
  + C) Infrastructure Automation
  + D) Static Infrastructure
* What is the significance of the "Shift-Left" approach in DevOps?
  + A) Shifting development to the left side of the office
  + B) Moving testing and quality assurance activities earlier in the development process
  + C) Shifting operations tasks to the beginning of the project
  + D) Moving the deployment phase to the left side of the timeline
* Which tool is commonly used for container orchestration in DevOps?
  + A) Jenkins
  + B) Docker
  + C) Kubernetes
  + D) Ansible
* What is the purpose of Continuous Monitoring in DevOps?
  + A) To monitor the physical health of team members
  + B) To monitor the availability and performance of applications and infrastructure
  + C) To track changes in project requirements
  + D) To automate code reviews
* What is the concept of "Infrastructure as Code" (IaC) in DevOps?
  + A) Manually configuring servers
  + B) Automating only the development process
  + C) Managing and provisioning infrastructure through code
  + D) Ignoring the infrastructure setup completely

**1,Explain SDLC life cycle**

**It is time saving ,cost effective , easy to maintain**

**2,Explain models of SDLC**

**Waterfall model**

**Agile model**

**3,DEv Vs OP**

**Dev means devoplement where code is devolped**

**Op means operaton where after code is devopled operation bigen to main in servers**

**4,explain DEvops diagram**.

Where devops have code build🡪code analysis 🡪code delivery🡪testing🡪secuerity🡪devoplyment🡪maintanance🡪end user