Module 11 CCNA -Automation and Programmability

# Beginner Question

* 1. Explain How Automation Impacts Network Management
     1. Network automation users programmable logic to manage network resource and service Network automation allows network network operation [NetOps] teams to config, scale, protect, and integrate network infrastructure and application services more quickly than when performed manually by users.
  2. Compare Traditional network with Controller based networking
     1. The key difference between SDN and traditional networking is infrastructure.
  3. Explain Virtualization
     1. Virtualization relies on software to simulate hardware functionality and create a virtual computer system.

# Intermediate Question

* + - 1. Describe Characteristics of REST-based API

A. RESTful services must have a uniform interface. The client must track the state of the session and send request containing all information required to process such a request.

# Advance Question

1. Explain methods of Automation
   1. Automation has been achieved by various means including mechanical, hydraulic, pneumatic, electronic device, electrical and computers.
2. Explain SDN
   1. Software-Defined Networking (SDN) is an approach to networking that uses software-based controllers or application programming interfaces (APIs) to communicate with underlying hardware infrastructure and direct traffic on a network.
3. Explain DNA Center
   1. DNA center is a totally open and extensible platform that contains multi-vendor software development kits that allows interaction with network equipment from other vendors.
4. Explain SD-Access and SD-WAN
   1. SD-wan and SD-access are ways to approach software-defined networking terminology while SD-accss is used to change the architecture of LAN network, SD-WAN creates next- generation wide area network with significant automation capabilities instead of MPLS/VPLS.