**Lab Scenario: E-Commerce Application Deployment on Huawei Cloud**

**Objective:** Design a scalable and secure e-commerce platform using Huawei Cloud services.

**Requirements:**

1. **Frontend:**
   * A **web application** hosted on **Huawei Elastic Cloud Server (ECS)**.
   * Use **Elastic Load Balance (ELB)** to distribute traffic.
   * Enable **Auto Scaling** to handle traffic spikes.
2. **Backend:**
   * Use **Huawei GaussDB (for MySQL)** as the product database.
   * Store product images in **Object Storage Service (OBS)** with **CDN** for fast delivery.
3. **Security & Monitoring:**
   * Protect the application with **Web Application Firewall (WAF)**.
   * Monitor performance using **Cloud Eye (APM)**.
   * Enable **DDoS Protection**.
4. **DevOps & CI/CD:**
   * Use **Huawei Cloud Container Engine (CCE)** for microservices.
   * Set up a CI/CD pipeline with **Huawei Cloud DevOps (CodeHub & CloudBuild)**.

**Lab Tasks for Students:**

1. **Draw the Architecture Diagram** using [Visual Paradigm Online](https://online.visual-paradigm.com/):
   * Use Huawei Cloud icons (available in VP’s library).
   * Show connections between components (e.g., ECS → ELB → Database).
2. **Label Key Components:**
   * Clearly mark security layers (WAF, DDoS), data flow, and scalability features.
3. **Add a Brief Explanation:**
   * Describe how each service contributes to the e-commerce platform.

**Expected Outcome:**

A well-structured Huawei Cloud diagram showing:  
✅ Frontend (ECS + ELB + Auto Scaling)  
✅ Backend (GaussDB + OBS + CDN)  
✅ Security (WAF + DDoS + Cloud Eye)  
✅ DevOps (CCE + CodeHub)

Reference Link:

https://online.visual-paradigm.com/diagrams/features/huawei-cloud-architecture-diagram-software/