|  |
| --- |
| **17. Integrated / Summative assessment Integrated situation**  KGL SOFT located in Gasabo district, is a medium-sized technology company that specializes in developing software applications. They store sensitive customer data, including personal information and payment details, on their servers. They have a headquarter and two branches, where the network, which is interconnecting them, is composed of different network devices such as (routers, switches, and servers,). The company implemented various cybersecurity measures to protect their data. However, the company is facing different challenges as follows:  ▪ Recently, some employees have been experiencing difficulties with their login credentials. They suspect that their accounts might have been compromised.  ▪ The company's firewall logs show an unusual increase in incoming traffic from a specific IP address located in a foreign country. This traffic is attempting to access the company's internal network.  ▪ The company is concerned about the security of data transmitted between their offices and data center. They suspect that data might be intercepted during transmission.  ▪ The IT security team notices an increase in phishing emails targeting employees. Some employees have fallen victim to these attacks, compromising their credentials.  ▪ The IT security team detects a suspicious login attempt on their core server. This login attempt was made by a user who should not have access to the server.  ▪ Further, the main company network security admin realized that the routers configurations are being modified by their co-admins without consulting him/her.  ▪ The system administrator was alerted by some system logs about unauthorized public IPs which are accessing systems devices and data.  ▪ Company suspects one of its employees of stealing proprietary source code and selling it to a competitor. They need evidence for possible legal action.  As cyber security expert, identify the cause of the above-mentioned issues, report them, and provide solutions in 8 hours |