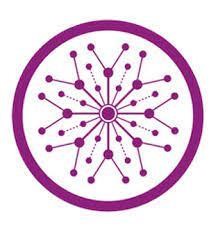
**Computer Networks Lab**



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**Program: Data Sciences**

**Section: 5A**

**Subject: Computer Networks Lab**

**Task # 9**

**Difference between Sub-netting and Super-netting**

|  |  |
| --- | --- |
| Sub-netting | Super-netting |
| Divides a single large network into smaller networks. | Combines multiple smaller networks into a larger network. |
| Optimizes network traffic, improves security, and allocates IP addresses efficiently. | Reduces the size of routing tables by combining networks for efficient routing. |
| Uses one large network IP block and divides it into smaller subnets. | Combines contiguous smaller IP blocks into a single larger block. |
| The subnet mask increases (e.g., /24 to /26). | The subnet mask decreases (e.g., /24 to /22). |
| Example: Dividing 192.168.1.0/24 into four subnets: 192.168.1.0/26, 192.168.1.64/26, etc. | **Example:** Combining 192.168.1.0/24 and 192.168.2.0/24 into 192.168.0.0/22. |