LINUX MASTER INTERVIEW GUIDE (Basic + Advanced + Real Outage Scenarios)

1. Basic Linux Commands

1 pwd – Show current working directory.
2 ls / ls -l / ls -la – List files and permissions.
3 cd – Change directory.
4 touch – Create empty file.
5 mkdir / mkdir -p – Create directories.
6 cp / mv / rm – Copy, move, delete files.
7 cat / less / head / tail -f – View files and logs.
8 grep / find – Search text and files.

2. Permissions & Ownership

1. ls -l – Check permissions.
2. chmod – Change permissions (numeric/symbolic).
3. chown / chgrp – Change owner and group.
4. Special permissions – SUID, SGID, Sticky bit.

3. Process, Memory & Performance

1 ps -ef / ps aux – Process snapshot.
2 top / htop – Live monitoring.
3 kill / kill -9 – Stop processes.
4 free -m – Memory usage.
5 uptime – Load average.
6 vmstat / iostat / iotop – Performance metrics.
7 df -h / du -sh – Disk usage.

4. Networking Commands

1 ip a / ip r – IP and routing.
2 ss -tulnp – Listening ports with process.
3 ping – Connectivity check.
4 curl / wget – Application & API test.
5 nc / nmap – Port testing.
6 tcpdump / traceroute – Deep network debugging.

5. Services, Logs & System

1. systemctl start/stop/status – Service control.
2. journalctl – System logs.
3. /var/log – Application logs.
4. uname -a – Kernel info.
5. dmesg – Kernel messages.

6. REAL-TIME OUTAGE SCENARIOS (INTERVIEW GOLD)

1. Application Down → systemctl status → journalctl → ss -tulnp → curl
2. High CPU → top → ps aux --sort=-%cpu → kill
3. Memory Issue / OOM → free -m → vmstat → restart app
4. Disk Full → df -h → du -sh /var/* → clear logs
5. Port Not Accessible → ss -tulnp → firewall → nc
6. Network Issue → ip a → ip r → ping → traceroute