Question 1)

First download the bash script file with name reversestring.sh or else copy the script and save the file. Similarly, should give executable permission to a file.

Now execute the script as shown below

Sh reversestring.sh welcome

Sh reversestring.sh harsha Vardhan

(In the above script we are passing the string while executing the script.)

Question 2)

First download the bash script file with name parseinterger.sh or else copy the script and save the file. Similarly, should give executable permission to a file.

Now execute the script as shown below

Sh parseinterger.sh 123-45-6789

Sh reversestring.sh 123456789

Sh reversestring.sh 123-456789

(In the above script we are passing the string while executing the script.)

Question 4)

Writing the bash script if possible, will share at the time of sharing desktop.

**Configuration Tools management**

I used ansible as a Configuration tool management, configured it to access remote server with password less login and added remote ips to host config file in ansible.

Here i shared three yml files in which use cases mentioned below

1. Nrpe.yml 🡪 Used to install nrpe plugin in all the remote servers (centos/Redhat)
2. Httpd.yml 🡪 Used to install httpd package and configured it as a service should automatically at system bootup, similarly created index.html and virtualhost config file. So that we can able to access the httpd page as http://<ipaddress>/index.html.
3. create\_start\_docker\_containers.yml 🡪 This file is used for build a docker image, push it to docker hub, and pull the image to all docker servers then start the container using docker service command. Here I used docker swarm as an orchestration tool.

**For below sections I will show it through desktop sharing.**

**AWS**

1. Created Three instances two in private with NAT gateway and 1 instance in Public as a jumpserver and through jump server user can able to login to servers in private subnet.
2. Created Two instances and installed application in it and configured it in ALB.

**Application Monitoring**

I used Nagios (opensource) as a monitoring tool in-order to monitor different services, so here I configured tomcat services for application monitoring.

**Container(s)**

I installed Docker in two machines and created dockerfile which will install httpd,php packages and copy file to a document root path and build an image.

Used docker swarm for orchestration tool. Where containers can be start with ansible playbook (create\_start\_docker\_containers.yml).