Deploy Application on Cloud write-up

steps and commands mentioned in the write-up below

1. Java JVM Install:
   To install Java JVM (Java Virtual Machine), the command used is:
   ```
   yum install java-1.8.0-openjdk
   ```

   This command installs the OpenJDK version 1.8.0, which is Java 8.

2. Docker Install:
   To install Docker, the command used is:
   ```
   yum install docker
   ```

   This command installs the Docker engine, which allows you to create, manage, and run containers.

3. Start Docker Service:
   To start the Docker service, the command used is:
   ```
   docker start
   ```

   This command starts the Docker daemon, enabling you to use Docker commands to manage containers.

4. MySQL Install:
   To install MySQL using Docker, the command used is:
   ```
   docker run --name docker-mysql -e MYSQL_ROOT_PASSWORD=password -e
   MYSQL_DATABASE=db1 -e MYSQL_USER=user -e MYSQL_PASSWORD=password -d
   mysql:latest --default-authentication-plugin=mysql_native_password
   ```

   This command runs a MySQL container with the specified configurations:
   - `--name docker-mysql`: Sets the name of the container as "docker-mysql".
   - `-e MYSQL_ROOT_PASSWORD=password`: Sets the root password for MySQL.
   - `-e MYSQL_DATABASE=db1`: Creates a database named "db1" in MySQL.
   - `-e MYSQL_USER=user`: Creates a MySQL user with the username "user".
   - `-e MYSQL_PASSWORD=password`: Sets the password for the MySQL user "user".
   - `-d mysql:latest`: Uses the latest version of the official MySQL Docker image.
   - `--default-authentication-plugin=mysql_native_password`: Specifies the authentication plugin for MySQL.

5. Docker Pull Image:
   To pull a Docker image from Docker Hub, the command used is:
   ```
   docker pull abeshdas/980283916312
   ```

   This command downloads the Docker image with the name "abeshdas/980283916312" from Docker Hub.

6. Docker Exec:

To execute a command inside a running Docker container, the command used is:
```
docker exec -it docker-mysql mysql -u user -ppassword
```

This command runs the `mysql` command inside the running "docker-mysql" container, connecting to MySQL with the specified username and password.

7. Link the Docker Images and Run:
   To run a Docker container while linking it to another container, the command used is:
```
docker run -p 8080:8080 --name vaccinefinalapp --link docker-mysql:mysql abcd/64290b2c2d9d
```

This command starts a new container named "vaccinefinalapp" based on the image "abcd/64290b2c2d9d". The container is linked to the "docker-mysql" container with an alias "mysql". Additionally, it maps port 8080 from the host to port 8080 of the container.

Note: The provided commands assume that Docker and Yum package manager are already installed and configured properly on the system. Additionally, some image names, IDs, or configurations may be specific to the user's setup.