**1Q)Create an EC2 instance for a Reactjs application and deploy the application and provide the public ip for it,also enable the cloud monitoring on this instances.**

**THEORY:**

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instance types comprise varying combinations of CPU, memory, storage, and networking capacity and give you the flexibility to choose the appropriate mix of resources for your applications. Each instance type includes one or more instance sizes, allowing you to scale your resources to the requirements of your target workload.

**STEPS:**

1. Click on Launch instance and then select create instance.

2. Give the name of the instance and select the OS image along with instance type.

3. Create the new key pair or if the key pair exists then select that keypair.

4. Now edit the network settings. Select the required VPC and subnets also enable auto assign ip.

5. Edit the security groups and click launch instance. Now the instance gets successfully launched.

6. Select the created instance and click actions and select Monitor and troubleshoot, manage detailed monitoring.

7. Now enable the detailed monitoring and confirm it.

8. Connect the instance & copy, paste the ssh command in the local machine.

9. Now connect to the root user.

**$sudo su**

10. Install node js and git.

**$sudo yum install –y nodejs**

**$yum install –y git**

11. Now clone the git repository and change to amazonreact directory.

12. Install the npm packages in that amazonreact directory.

**$npm install**

13. Install nginx and start it. Now create build directory.

**$yum install nginx**

**$systemctl start nginx**

**$npm run build**

14. Now give the following commands and write the code in vi editor.

**$cp –r /home/ec2-user/Devops\_Batch\_Aditya/amazonreact/build/\* /usr/share/nginx/html**

**$vi /etc/nginx/conf.d/your-app.conf**

***CODE*: (FOR EXAMPLE)**

**Server{**

**listen 80;**

**server\_name ip-address;**

**root /usr/share/nginx/html;**

**index index.html;**

**location / {**

**try\_files $uri $uri/ /index.html;**

**}**

**}**

15. Run the following commands to reload nginx.

**$nginx –t**

**$systenctl reload nginx**

16. Now paste the public ip address in the browser and the application gets opened.