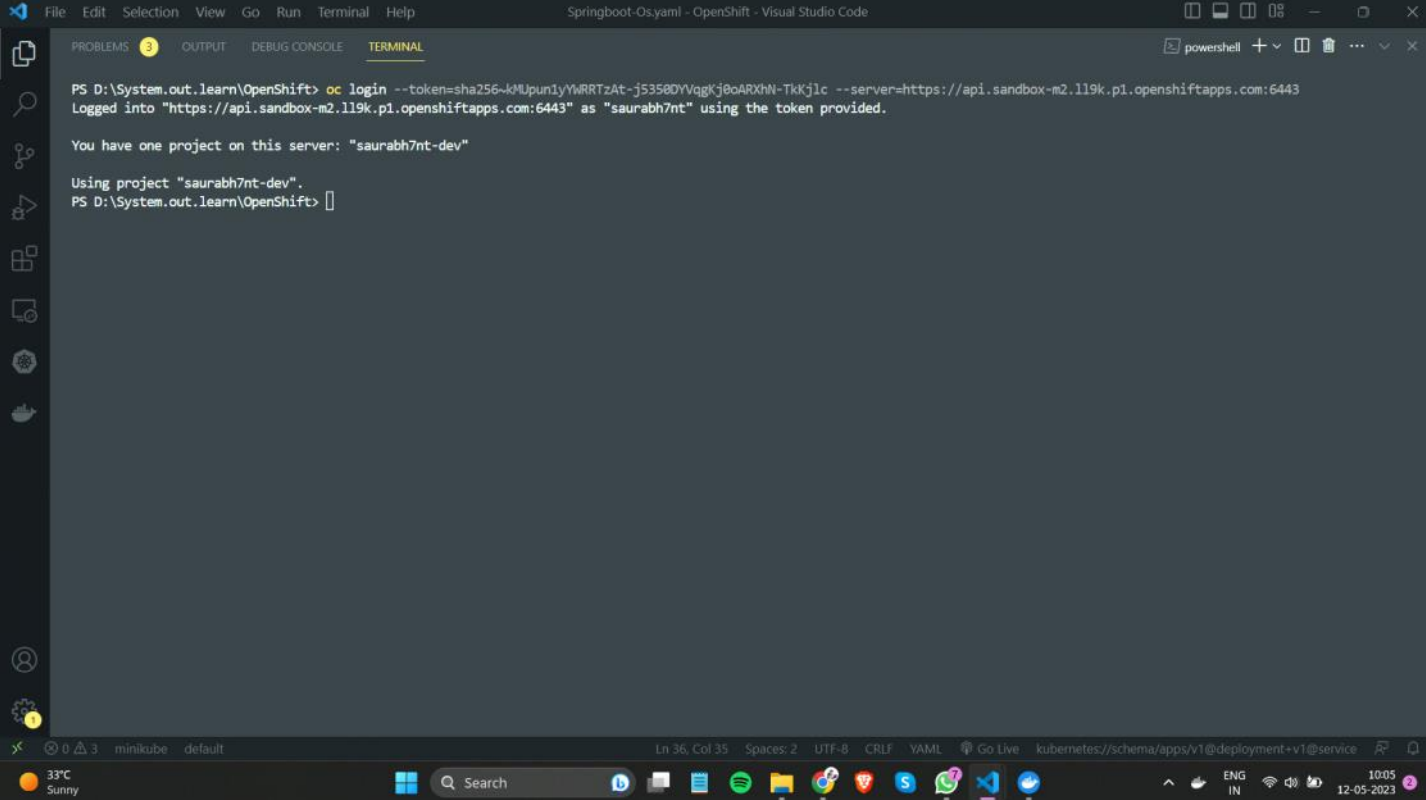


Login :



```

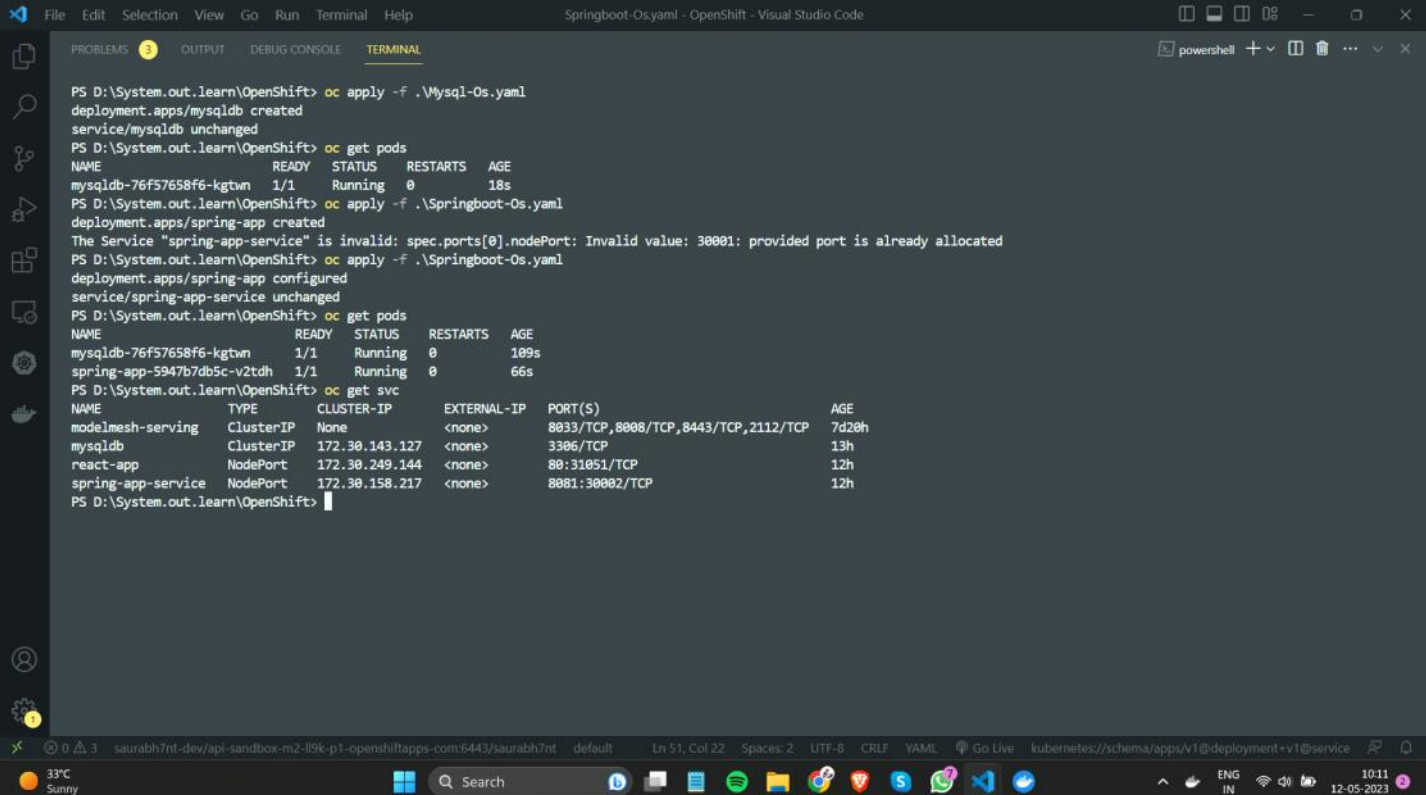
PS D:\System.out.learn\OpenShift> oc login --token=sha256~kMUpun1yYWRRTzAt-j5358DYVgKj0oARXhN-TKKjlc --server=https://api.sandbox-m2.119k.p1.openshiftapps.com:6443
Logged into "https://api.sandbox-m2.119k.p1.openshiftapps.com:6443" as "saurabh7nt" using the token provided.

You have one project on this server: "saurabh7nt-dev"

Using project "saurabh7nt-dev".
PS D:\System.out.learn\OpenShift>

```

Applying yaml files of deployment and service :

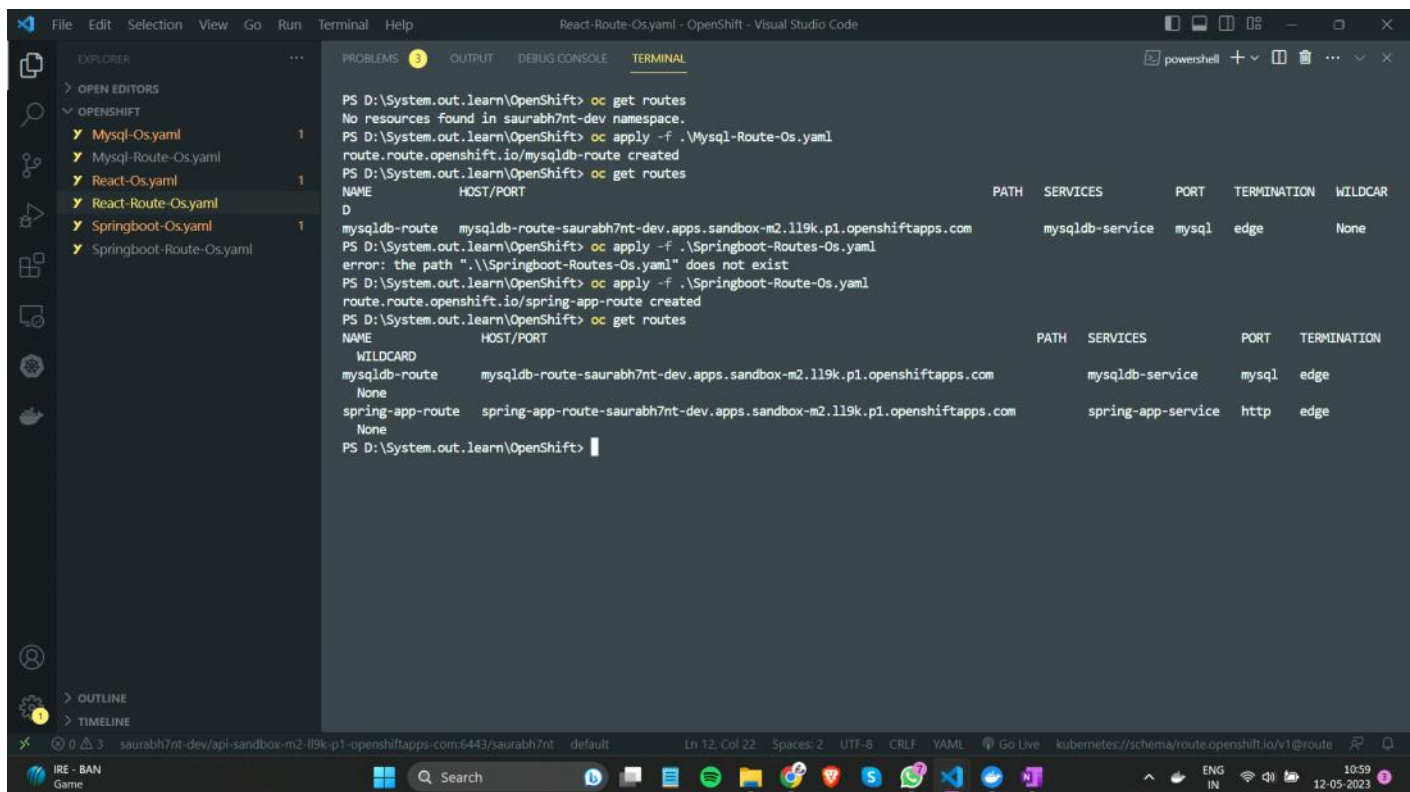


```

PS D:\System.out.learn\OpenShift> oc apply -f .\Mysql-Os.yaml
deployment.apps/mysqlpdb created
service/mysqlpdb unchanged
PS D:\System.out.learn\OpenShift> oc get pods
NAME                                READY   STATUS    RESTARTS   AGE
mysqlpdb-76f57658f6-kgtwn           1/1     Running   0           18s
PS D:\System.out.learn\OpenShift> oc apply -f .\Springboot-Os.yaml
deployment.apps/spring-app created
The Service "spring-app-service" is invalid: spec.ports[0].nodePort: Invalid value: 38081: provided port is already allocated
PS D:\System.out.learn\OpenShift> oc apply -f .\Springboot-Os.yaml
deployment.apps/spring-app configured
service/spring-app-service unchanged
PS D:\System.out.learn\OpenShift> oc get pods
NAME                                READY   STATUS    RESTARTS   AGE
mysqlpdb-76f57658f6-kgtwn           1/1     Running   0           109s
spring-app-5947b7db5c-v2tdh         1/1     Running   0           66s
PS D:\System.out.learn\OpenShift> oc get svc
NAME                                TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)                                     AGE
modelmesh-serving                   ClusterIP    None          <none>         8033/TCP,8008/TCP,8443/TCP,2112/TCP        7d20h
mysqlpdb                             ClusterIP    172.30.143.127 <none>         3306/TCP                                    13h
react-app                           NodePort     172.30.249.144 <none>         80:31051/TCP                              12h
spring-app-service                  NodePort     172.30.158.217 <none>         8081:38082/TCP                            12h
PS D:\System.out.learn\OpenShift>

```

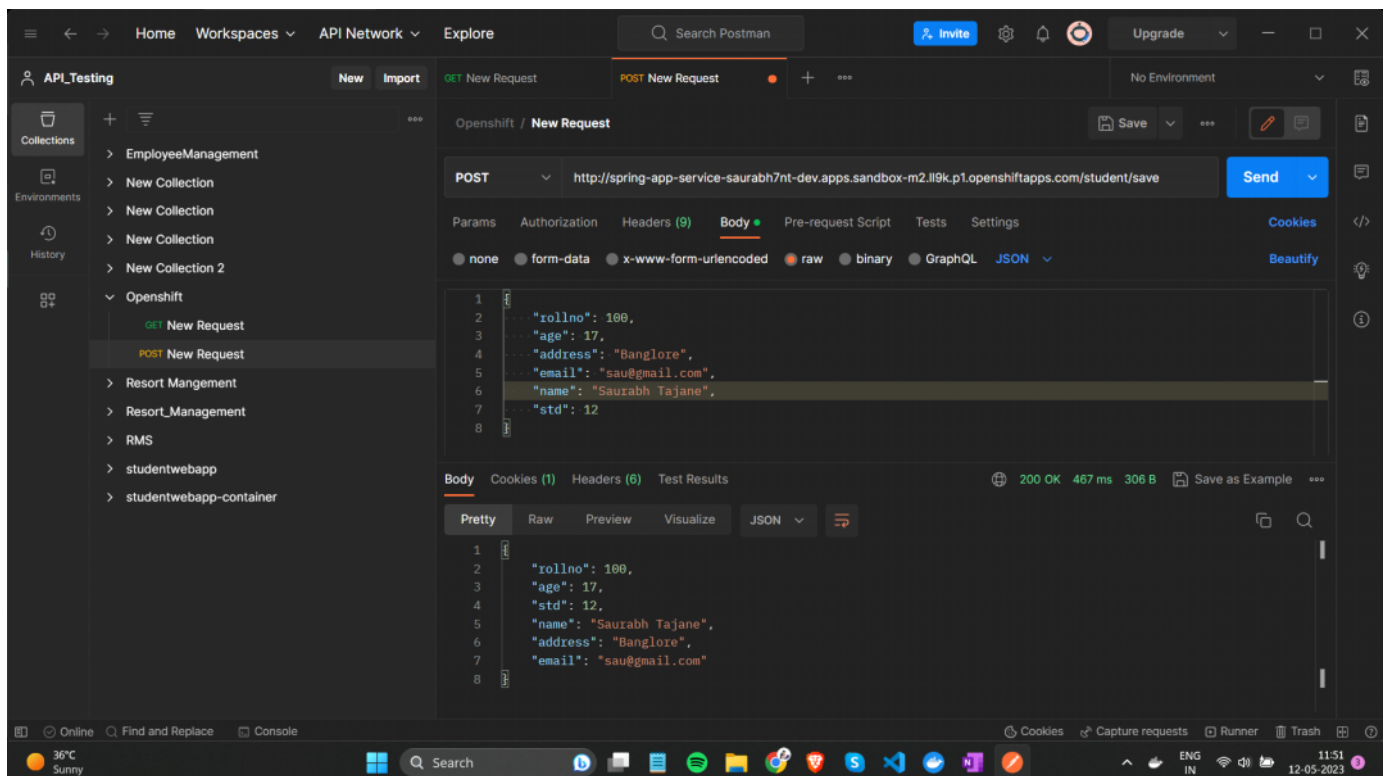
Creating route to expose the service :



```
PS D:\System.out.learn\OpenShift> oc get routes
No resources found in saurabh7nt-dev namespace.
PS D:\System.out.learn\OpenShift> oc apply -f .\Mysql-Route-Os.yaml
route.route.openshift.io/mysql-route created
PS D:\System.out.learn\OpenShift> oc get routes
NAME                                HOST/PORT                                PATH    SERVICES    PORT    TERMINATION  WILDCARD
D
mysql-route                         mysql-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com  mysql-service  mysql  edge        None
PS D:\System.out.learn\OpenShift> oc apply -f .\Springboot-Route-Os.yaml
error: the path ".\Springboot-Route-Os.yaml" does not exist
PS D:\System.out.learn\OpenShift> oc apply -f .\Springboot-Route-Os.yaml
route.route.openshift.io/spring-app-route created
PS D:\System.out.learn\OpenShift> oc get routes
NAME                                HOST/PORT                                PATH    SERVICES    PORT    TERMINATION  WILDCARD
mysql-route                         mysql-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com  mysql-service  mysql  edge        None
spring-app-route                   spring-app-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com  spring-app-service  http  edge        None
PS D:\System.out.learn\OpenShift>
```

Using the spring boot service through postman :

1. Sending data :



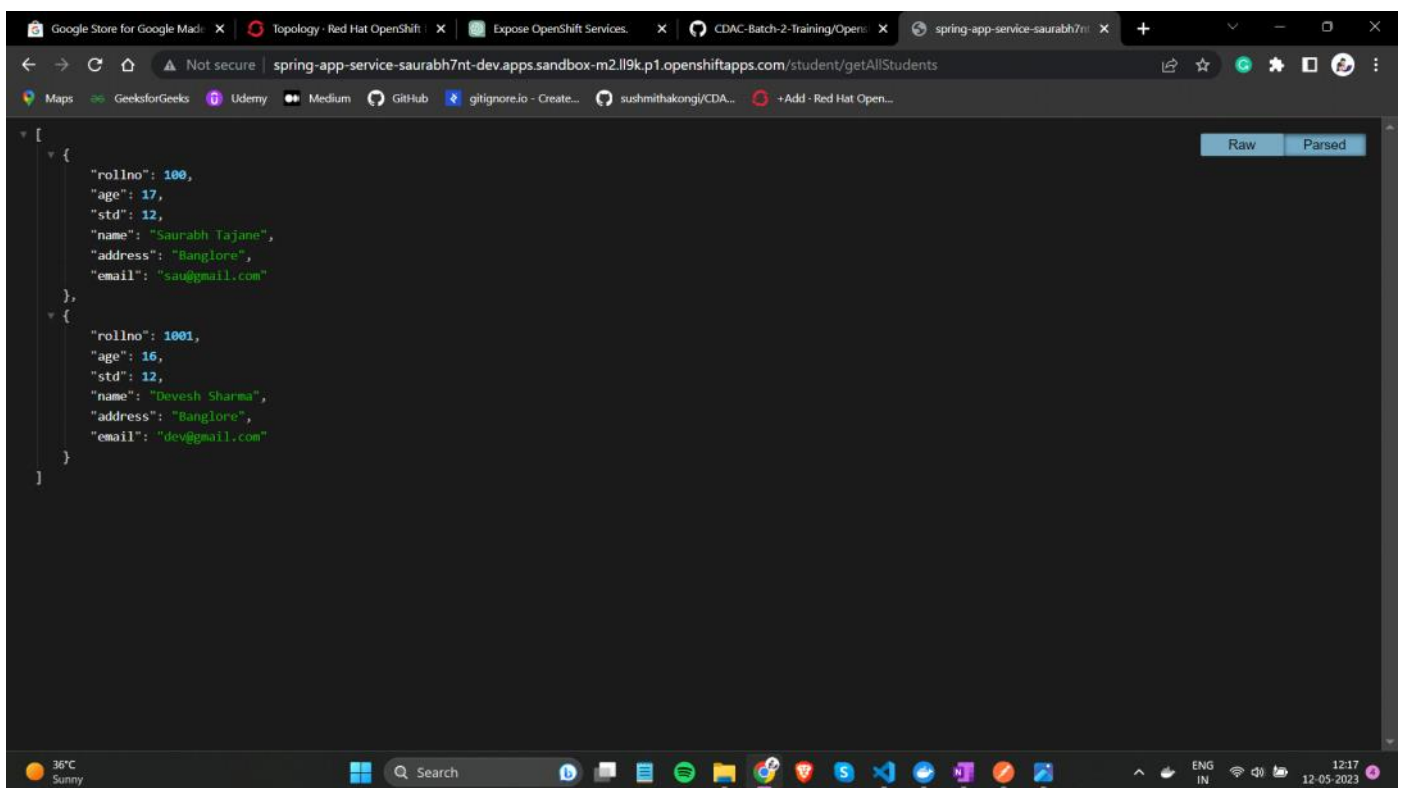
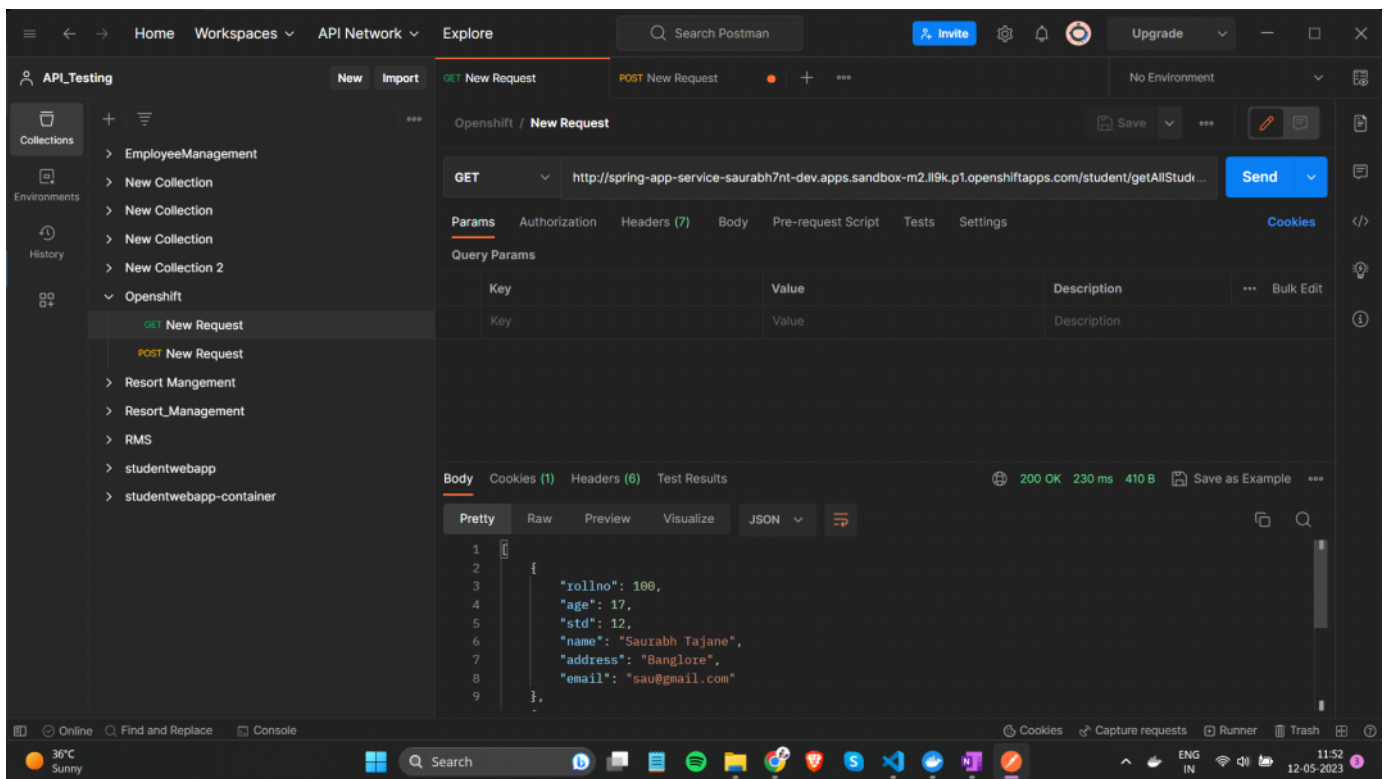
```
POST http://spring-app-service-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com/student/save

{
  "rollno": 100,
  "age": 17,
  "address": "Bangalore",
  "email": "sau@gmail.com",
  "name": "Saurabh Tajane",
  "std": 12
}
```

Body: Pretty, Raw, Preview, Visualize, JSON

```
1
2
3
4
5
6
7
8
{
  "rollno": 100,
  "age": 17,
  "std": 12,
  "name": "Saurabh Tajane",
  "address": "Bangalore",
  "email": "sau@gmail.com"
}
```

2. Successfully Fetching data :



Scaling up our application :

The screenshot shows the Red Hat OpenShift console interface. The left sidebar contains navigation links: Administrator, Home, Operators, Workloads, Pods, Deployments, DeploymentConfigs, StatefulSets, Secrets, ConfigMaps, CronJobs, Jobs, DaemonSets, and ReplicaSets. The main panel displays the 'Deployment details' for the 'spring-app' deployment in the 'saurabh7nt-dev' namespace. A circular progress indicator shows '2 Pods'. The deployment name is 'spring-app', and the namespace is 'saurabh7nt-dev'. The update strategy is 'RollingUpdate'. The 'Max unavailable' status is '25% of 2 pods'. The 'Max surge' status is '25% greater than 2 pods'. The 'Labels' section shows 'No labels'. The bottom status bar indicates '36°C Sunny' and the time '11:57 12-05-2023'.

The screenshot shows the Red Hat OpenShift console interface with the 'Pods' view selected. The left sidebar is the same as the previous screenshot. The main panel displays a list of pods in the 'saurabh7nt-dev' namespace. A 'Create Pod' button is visible in the top right. The pods are listed in a table with columns: Name, Status, Ready, Restarts, Owner, Memory, CPU, and Created. The table contains four rows of pods, all with a status of 'Running'.

Name	Status	Ready	Restarts	Owner	Memory	CPU	Created
mysqlb-76f57658f6-kgtwn	Running	1/1	0	RS mysqlb-76f57658f6	429.7 MiB	0.002 cores	May 12, 2023, 10:06 AM
spring-app-5947b7db5c-cwxvd	Running	1/1	0	RS spring-app-5947b7db5c	169.1 MiB	0.000 cores	May 12, 2023, 11:55 AM
spring-app-5947b7db5c-sqdnw	Running	1/1	0	RS spring-app-5947b7db5c	173.5 MiB	0.000 cores	May 12, 2023, 11:57 AM
spring-app-5947b7db5c-v2tdh	Running	1/1	0	RS spring-app-5947b7db5c	175.4 MiB	0.001 cores	May 12, 2023, 10:07 AM

Tried to deploy our frontend(React) but got this error :

The screenshot shows a Visual Studio Code window with the terminal open. The terminal output shows the command `oc get pods` and its output, which lists several pods in a 'Running' state. Below this, the command `oc logs react-app-78754f87cc-bngsh` is executed, followed by `studentwebapp@0.1.0 start` and `react-scripts start`. An npm error is displayed, indicating a file access issue with the npm cache.

```

PS D:\System.out.learn\OpenShift> oc get pods
NAME                                READY    STATUS    RESTARTS   AGE
mysqlb-76f57658f6-5prh5             1/1      Running   0           24m
mysqlb-76f57658f6-kgtwn             1/1      Running   0           137m
mysqlb-76f57658f6-vr2f4             1/1      Running   0           24m
react-app-78754f87cc-bngsh          0/1      CrashLoopBackOff   2 (20s ago)  49s
spring-app-5947b7db5c-cxwvd        1/1      Running   0           28m
spring-app-5947b7db5c-sqdmw        1/1      Running   0           26m
spring-app-5947b7db5c-v2tdh        1/1      Running   0           136m
PS D:\System.out.learn\OpenShift> oc logs react-app-78754f87cc-bngsh

> studentwebapp@0.1.0 start
> react-scripts start

npm ERR! code EACCESS
npm ERR! syscall mkdir
npm ERR! path /.npm
npm ERR! errno -13
npm ERR!
npm ERR! Your cache folder contains root-owned files, due to a bug in
npm ERR! previous versions of npm which has since been addressed.
npm ERR!
npm ERR! To permanently fix this problem, please run:
npm ERR!   sudo chown -R 1013710000:0 ~/.npm

npm ERR! Log files were not written due to an error writing to the directory: /.npm/_logs
npm ERR! You can rerun the command with '--loglevel=verbose' to see the logs in your terminal
PS D:\System.out.learn\OpenShift>

```

Later on solved that error and created deployment, service and routes of react :

The screenshot shows a Visual Studio Code window with the terminal open. The terminal output shows the command `oc get routes` and its output, which lists several routes in a 'None' state. Below this, the command `oc get routes` is executed, followed by `studentwebapp@0.1.0 start` and `react-scripts start`. The output shows the routes for the application, including the react-app-route and spring-app-route.

```

PS D:\System.out.learn\OpenShift> oc get routes
NAME                                HOST/PORT
ION                                WILDCARD
mysqlb-route                        mysqlb-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com
react-app-route                     react-app-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com
react-app-service                   react-app-service-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com
spring-app-route                    spring-app-route-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com
spring-app-service                  spring-app-service-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com
PS D:\System.out.learn\OpenShift>

```

Accessing Student Management Application :



Adding data :

A screenshot of the 'Add Student' form in the Student Management App. The browser address bar shows the URL 'react-app-service-saurabh7nt-dev.apps.sandbox-m2.119k.p1.openshiftapps.com/student/add/'. The form is titled 'Student Management' and includes a search bar. The form fields are: 'Student Name' (filled with 'Walter White'), 'Roll no.' (filled with '1005'), 'Std' (filled with '12'), 'Age' (filled with '17'), 'Email' (filled with 'white@gmail.com'), and 'Address' (filled with 'NY'). A blue 'Submit' button is at the bottom of the form. The Windows taskbar at the bottom shows the date as 12-05-2023 and the time as 15:42.

Fetching data :

Google Sto x Pods Red x Expose Op x CDAC-Bat x spring-app x NPM Perm x nodejs - Ji x saurabh7m x React App x

Not secure react-app-service-saurabh7nt-dev.apps.sandbox-m2.ll9k.p1.openshiftapps.com/student/show/

Maps GeeksforGeeks Udem Medium GitHub gitignore.io - Create... sushmithakongl/CDA... +Add - Red Hat Open...

Student Management Home Add Student Show Students

Search Search

Student Management App

List of Students :

ROLL ID	NAME	EMAIL	STD	AGE	ADDRESS	ACTION
100	Saurabh Tajane	sau@gmail.com	12	17	Banglore	Delete
1001	Devesh Sharma	dev@gmail.com	12	16	Banglore	Delete
1003	Saurabh	sparrow@gmail.com	12	17	Banglore	Delete
1004	Devesh	demo@gmail.com	17	12	Banglore	Delete
1005	Walter White	white@gmail.com	12	17	NY	Delete

41°C Sunny

Search

ENG IN 15:42 12-05-2023