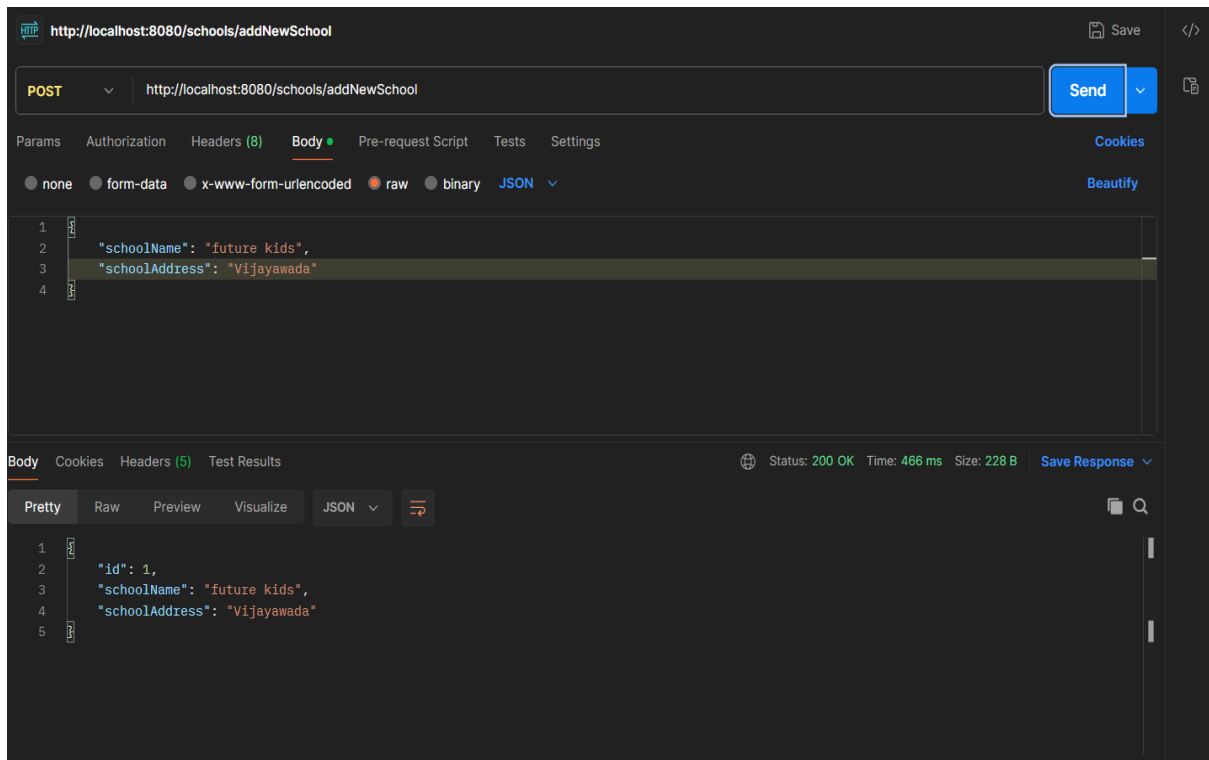


1. Created a school name “Future kids” with id=1.



REST client interface showing a POST request to `http://localhost:8080/schools/addNewSchool`. The request body is JSON:

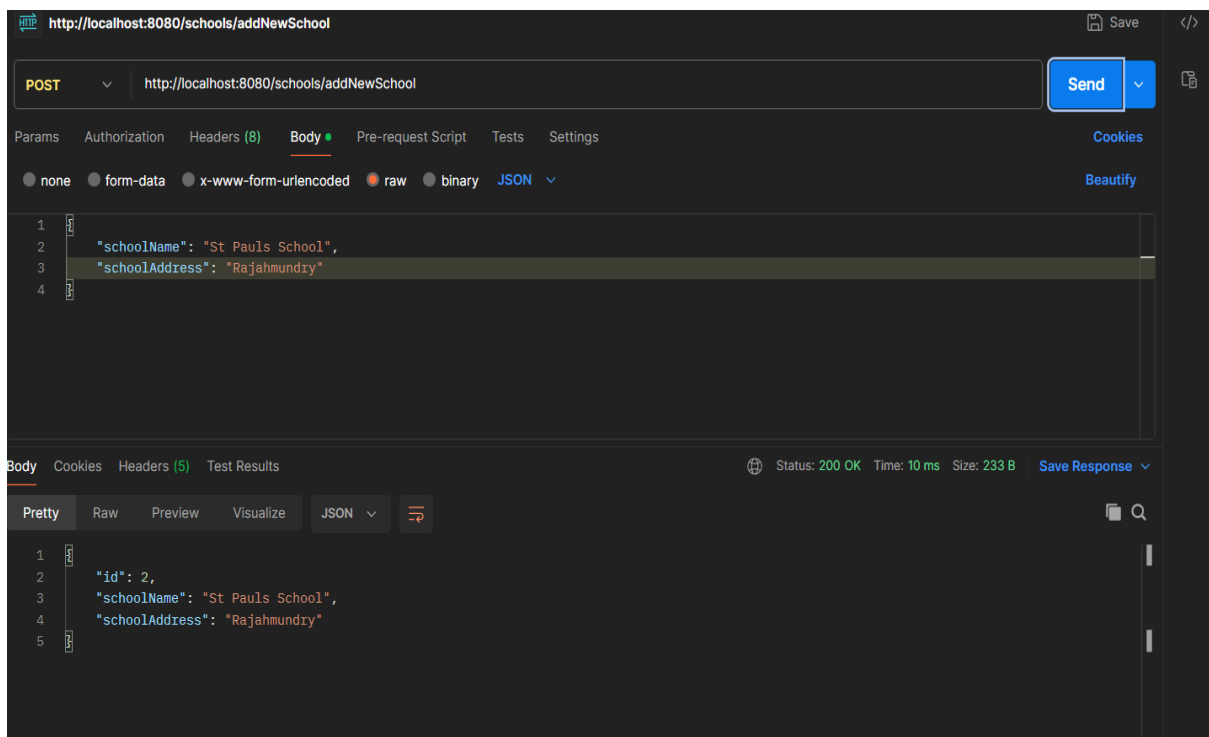
```
{  "schoolName": "future kids",  "schoolAddress": "Vijayawada"}
```

The response is JSON:

```
{  "id": 1,  "schoolName": "future kids",  "schoolAddress": "Vijayawada"}
```

Status: 200 OK, Time: 466 ms, Size: 228 B.

2. Created a school name “St Pauls School” with id=2.



REST client interface showing a POST request to `http://localhost:8080/schools/addNewSchool`. The request body is JSON:

```
{  "schoolName": "St Pauls School",  "schoolAddress": "Rajahmundry"}
```

The response is JSON:

```
{  "id": 2,  "schoolName": "St Pauls School",  "schoolAddress": "Rajahmundry"}
```

Status: 200 OK, Time: 10 ms, Size: 233 B.

3. Created a school name “Bhashyam School” with id=3.

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/schools/addNewSchool`
- Method:** `POST`
- Body (JSON):**

```
{  "schoolName": "Bhashyam School",  "schoolAddress": "Hyderabad"}
```
- Status:** `200 OK`, Time: 9 ms, Size: 231 B
- Response Body (JSON):**

```
{  "id": 3,  "schoolName": "Bhashyam School",  "schoolAddress": "Hyderabad"}
```

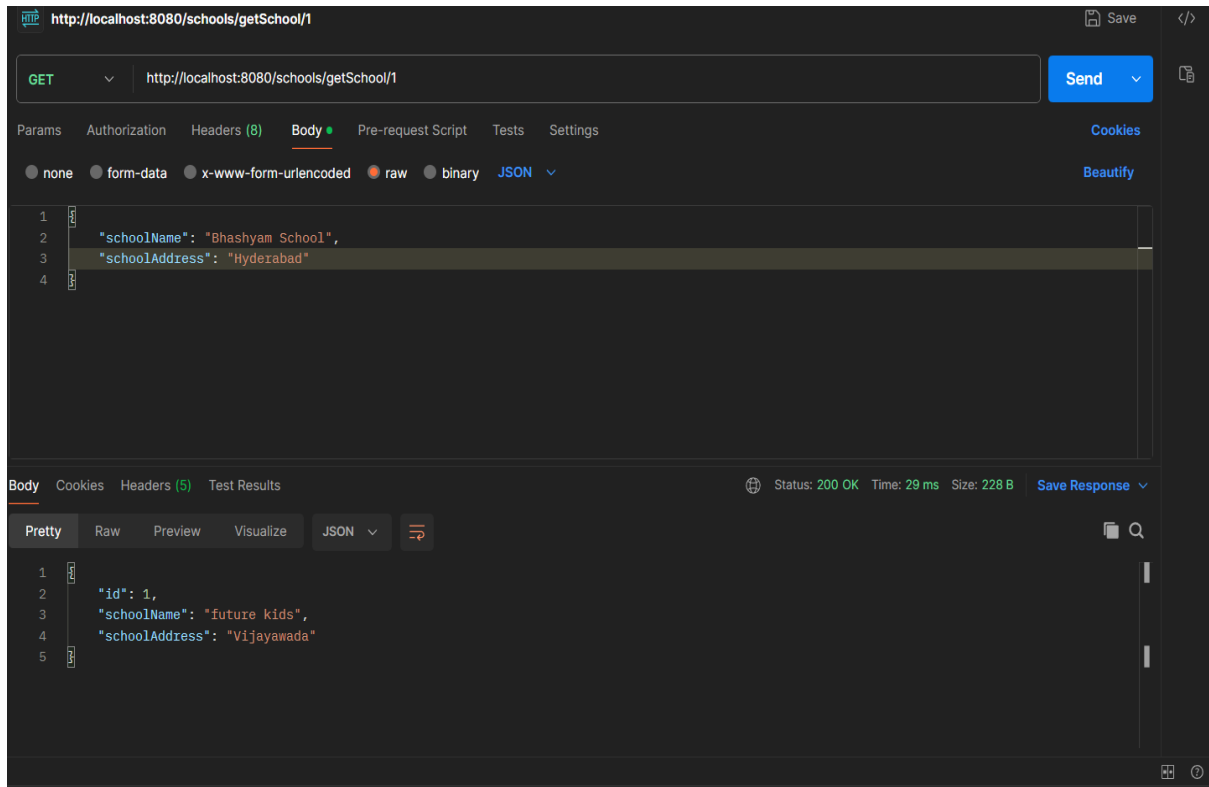
4. Fetching all schools data from database

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/schools/getAllSchools`
- Method:** `GET`
- Status:** `200 OK`, Time: 214 ms, Size: 368 B
- Response Body (JSON):**

```
{  "id": 1,  "schoolName": "future kids",  "schoolAddress": "Vijayawada"},  {  "id": 2,  "schoolName": "St Pauls School",  "schoolAddress": "Rajahmundry"},  {  "id": 3,  "schoolName": "Bhashyam School",  "schoolAddress": "Hyderabad"}
```

5. Retrieving school by their id number

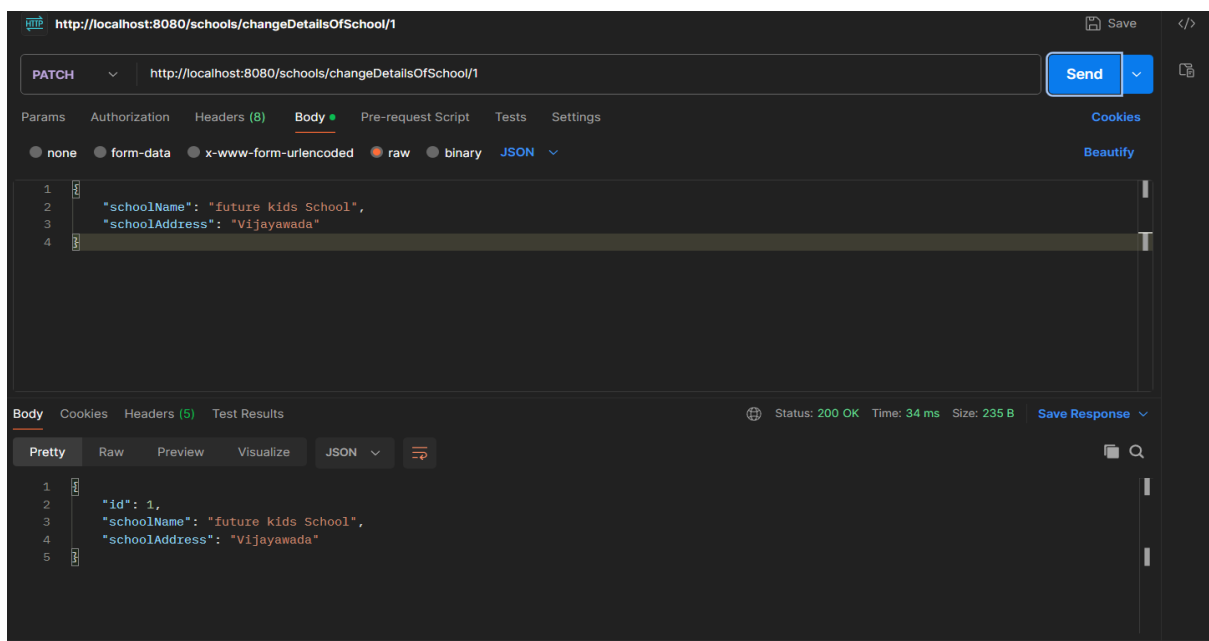


The screenshot shows a REST client interface with a GET request to `http://localhost:8080/schools/getSchool/1`. The response is a JSON object with the following structure:

```
{  "id": 1,  "schoolName": "future kids",  "schoolAddress": "Vijayawada"}
```

The status bar indicates a 200 OK response with a time of 29 ms and a size of 228 B.

6. Changing the name of the school from “future kids” to “future kids School”



The screenshot shows a REST client interface with a PATCH request to `http://localhost:8080/schools/changeDetailsOfSchool/1`. The request body is a JSON object with the following structure:

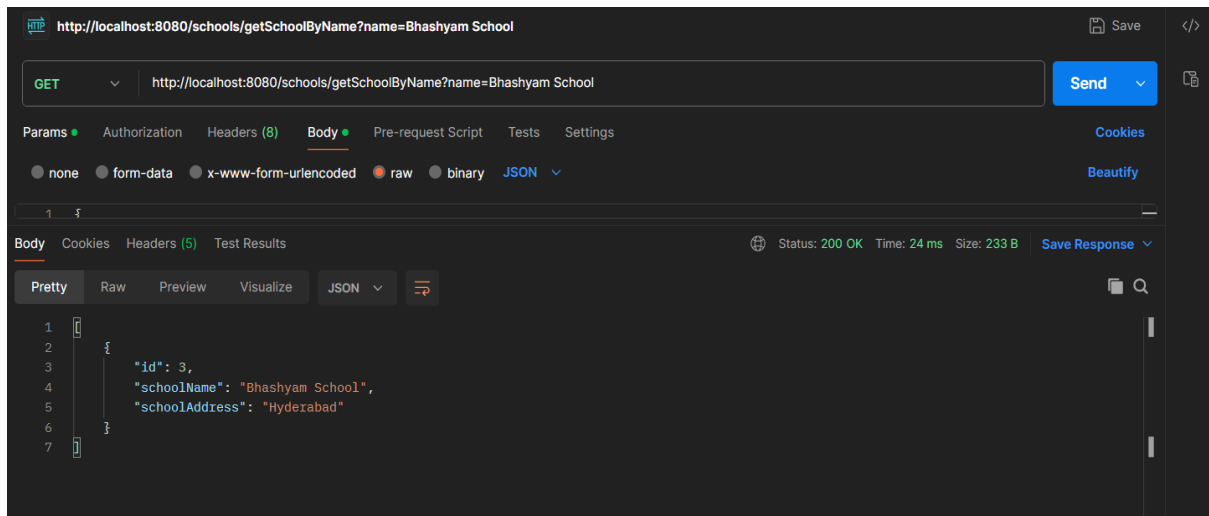
```
{  "schoolName": "future kids School",  "schoolAddress": "Vijayawada"}
```

The response is a JSON object with the following structure:

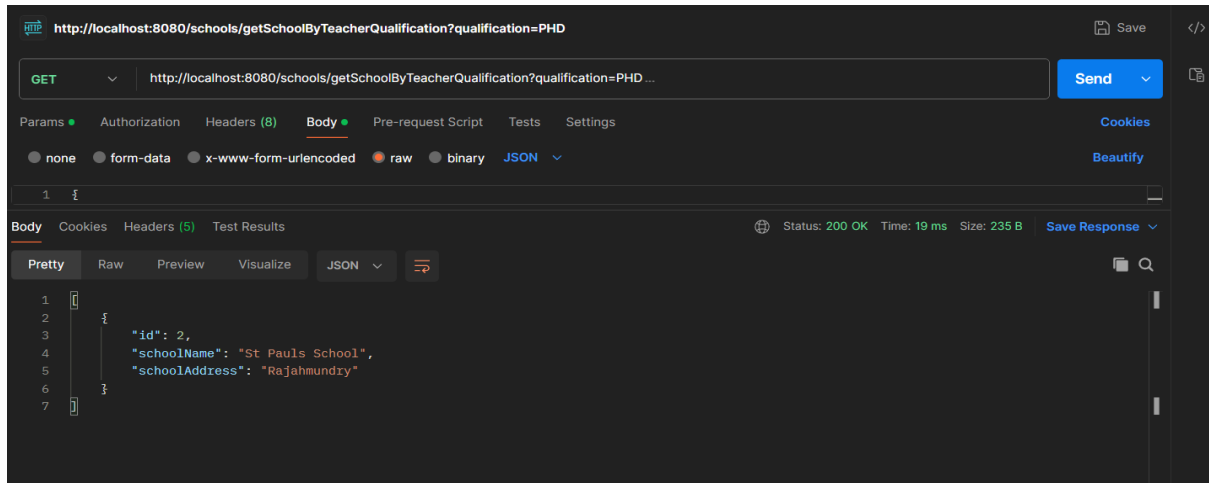
```
{  "id": 1,  "schoolName": "future kids School",  "schoolAddress": "Vijayawada"}
```

The status bar indicates a 200 OK response with a time of 34 ms and a size of 235 B.

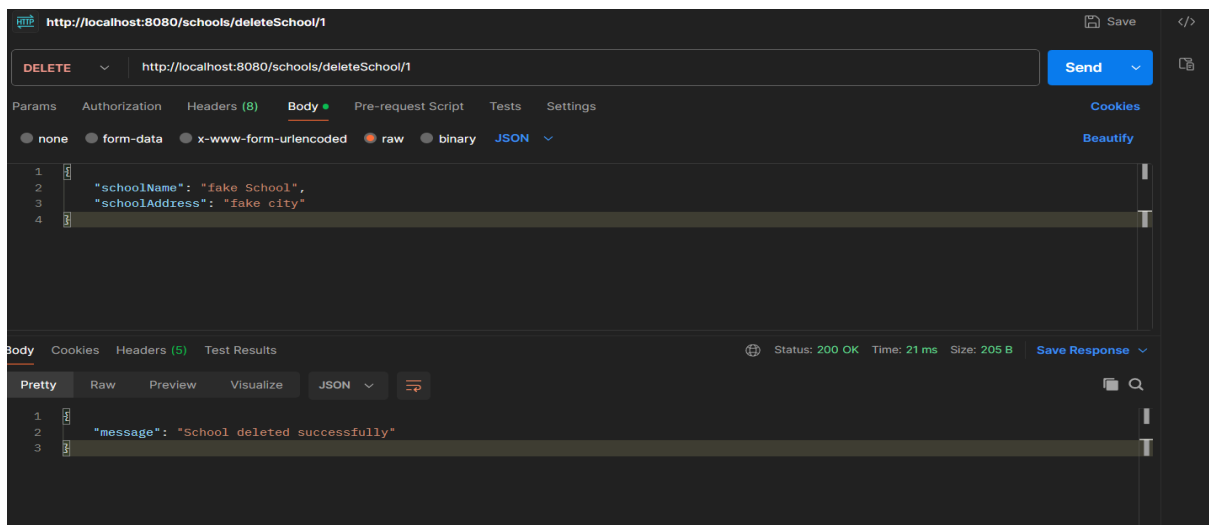
7. Retrieving school by their names.



8. Retrieving school by their qualifications.



9. Created “Fake school” for deleting and its deleted successfully.



10. Now adding Teacher details “Nivedha” and linking with school Id=1 with teacher id=1.

The screenshot shows a REST client interface with the URL `http://localhost:8080/teachers/addNewTeacher` and the method `POST`. The request body is a JSON object representing a teacher named Nivedha, linked to school id=1. The response is a JSON object with the same data, including an `id` field set to 1. The status is 200 OK.

```
POST http://localhost:8080/teachers/addNewTeacher

{
  "teacherName": "Nivedha",
  "teacherAddress": "Kakinada",
  "qualification": "MASTERS",
  "age": 28,
  "dob": "1997-05-15",
  "experience": 2,
  "school": {
    "id": 1
  }
}
```

```
{
  "id": 1,
  "teacherName": "Nivedha",
  "teacherAddress": "Kakinada",
  "qualification": "MASTERS",
  "age": 28,
  "dob": "1997-05-15T00:00:00+00:00",
  "experience": 2,
  "school": {
    "id": 1,
    "schoolName": "Future Kids School",
    "schoolAddress": "Vijayawada"
  }
}
```

11. Now adding Teacher details “Kavya” and linking with school id=2 with teacher id=2.

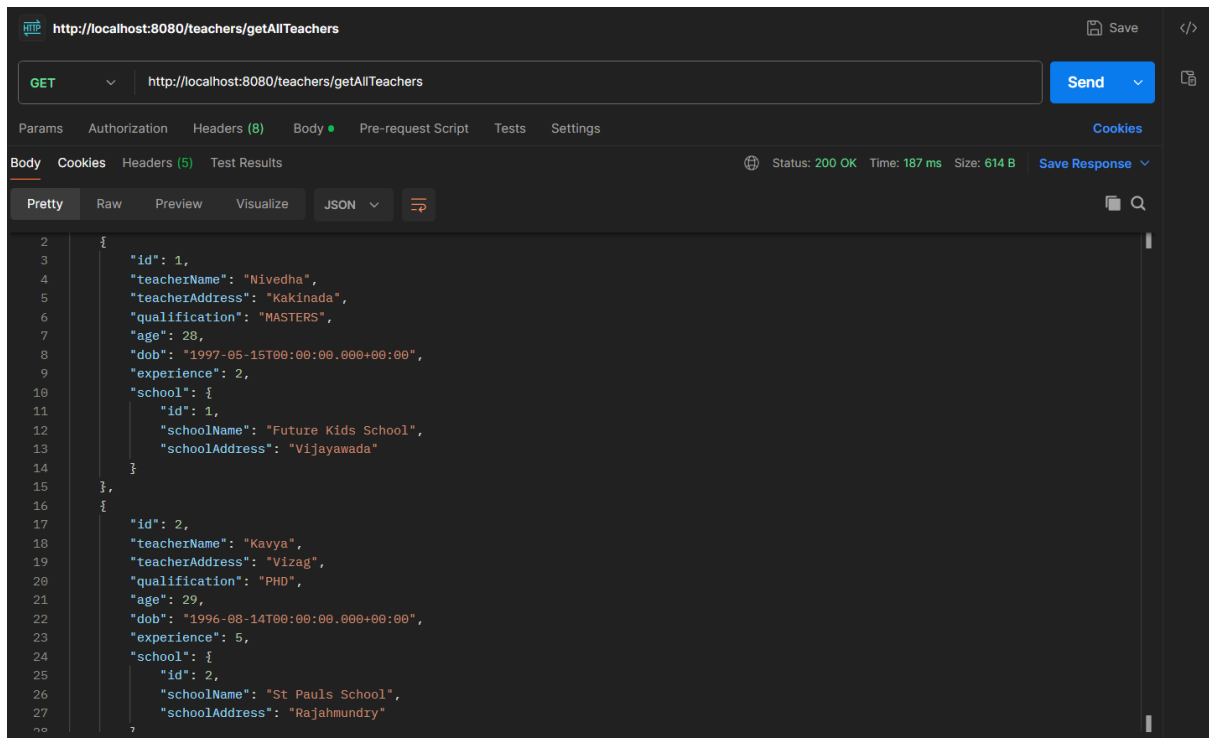
The screenshot shows a REST client interface with the URL `http://localhost:8080/teachers/addNewTeacher` and the method `POST`. The request body is a JSON object representing a teacher named Kavya, linked to school id=2. The response is a JSON object with the same data, including an `id` field set to 2. The status is 200 OK.

```
POST http://localhost:8080/teachers/addNewTeacher

{
  "teacherName": "Kavya",
  "teacherAddress": "Vizag",
  "qualification": "PHD",
  "age": 29,
  "dob": "1996-08-14",
  "experience": 5,
  "school": {
    "id": 2
  }
}
```

```
{
  "id": 2,
  "teacherName": "Kavya",
  "teacherAddress": "Vizag",
  "qualification": "PHD",
  "age": 29,
  "dob": "1996-08-14T00:00:00+00:00",
  "experience": 5,
  "school": {
    "id": 2,
    "schoolName": "St Pauls School",
    "schoolAddress": "Rajahmundry"
  }
}
```

12. Retrieving All teachers from database



HTTP <http://localhost:8080/teachers/getAllTeachers> Save </>

GET <http://localhost:8080/teachers/getAllTeachers> Send

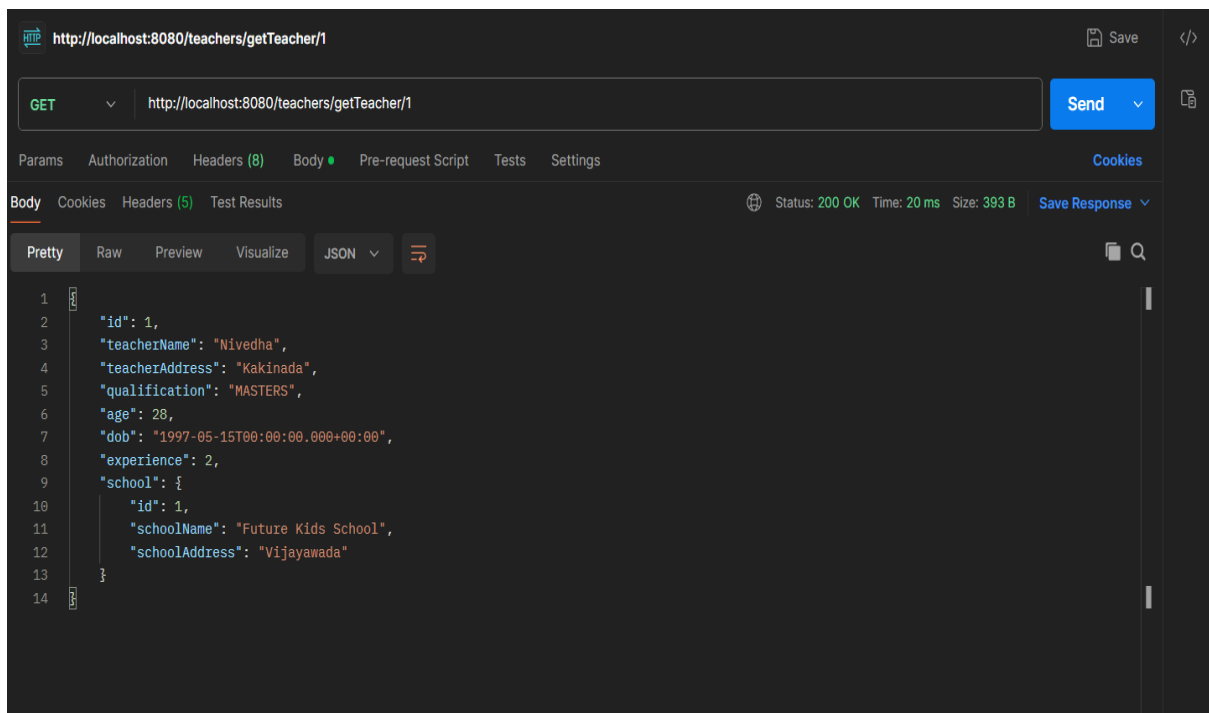
Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Body Cookies Headers (5) Test Results Status: 200 OK Time: 187 ms Size: 614 B Save Response

Pretty Raw Preview Visualize JSON

```
2 {
3   "id": 1,
4   "teacherName": "Nivedha",
5   "teacherAddress": "Kakinada",
6   "qualification": "MASTERS",
7   "age": 28,
8   "dob": "1997-05-15T00:00:00.000+00:00",
9   "experience": 2,
10  "school": {
11    "id": 1,
12    "schoolName": "Future Kids School",
13    "schoolAddress": "Vijayawada"
14  },
15 },
16 {
17   "id": 2,
18   "teacherName": "Kavya",
19   "teacherAddress": "Vizag",
20   "qualification": "PHD",
21   "age": 29,
22   "dob": "1996-08-14T00:00:00.000+00:00",
23   "experience": 5,
24   "school": {
25     "id": 2,
26     "schoolName": "St Pauls School",
27     "schoolAddress": "Rajahmundry"
28   }
29 }
```

13. Fetching teachers data by their IDs.



HTTP <http://localhost:8080/teachers/getTeacher/1> Save </>

GET <http://localhost:8080/teachers/getTeacher/1> Send

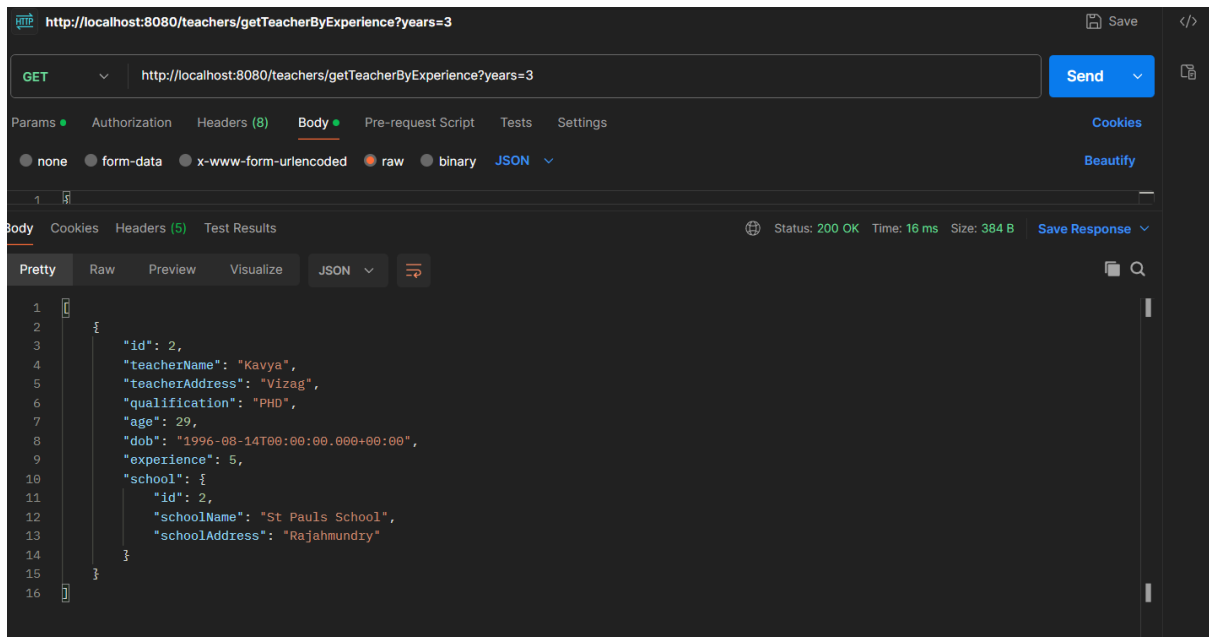
Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Body Cookies Headers (5) Test Results Status: 200 OK Time: 20 ms Size: 393 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 1,
3   "teacherName": "Nivedha",
4   "teacherAddress": "Kakinada",
5   "qualification": "MASTERS",
6   "age": 28,
7   "dob": "1997-05-15T00:00:00.000+00:00",
8   "experience": 2,
9   "school": {
10    "id": 1,
11    "schoolName": "Future Kids School",
12    "schoolAddress": "Vijayawada"
13  }
14 }
```

14. Fetching Teacher details by their experience.



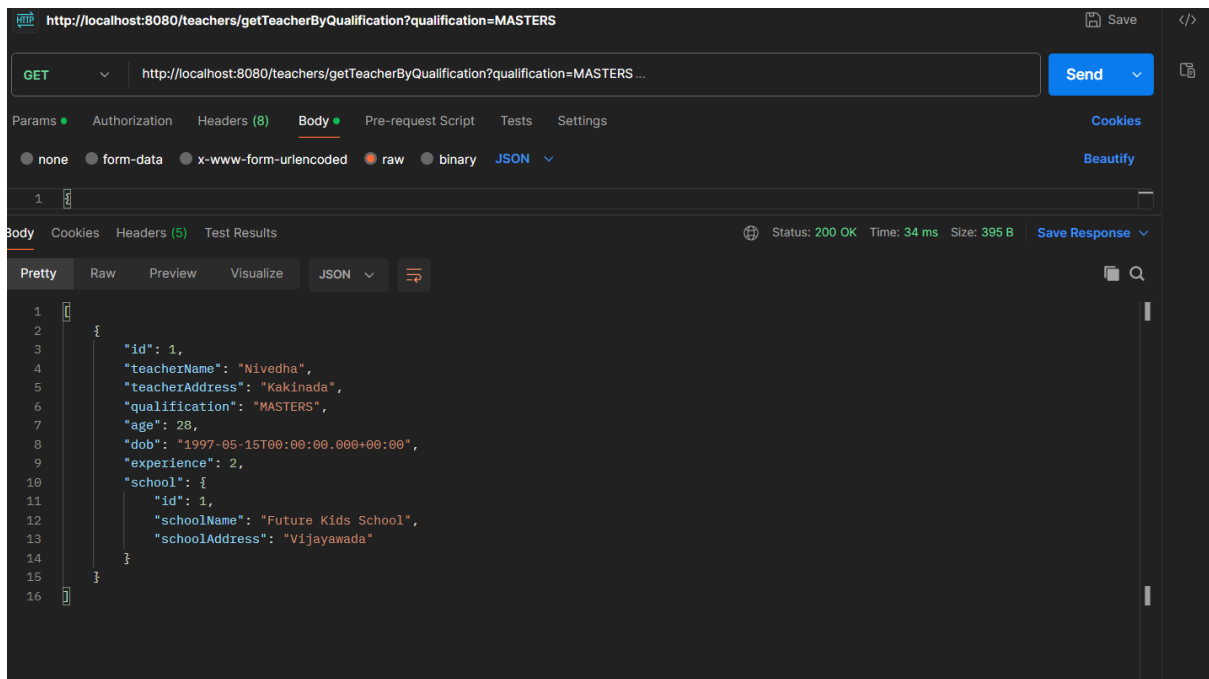
The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/teachers/getTeacherByExperience?years=3`
- Method:** GET
- Status:** 200 OK
- Time:** 16 ms
- Size:** 384 B

The response body is a JSON object:

```
{
  "id": 2,
  "teacherName": "Kavya",
  "teacherAddress": "Vizag",
  "qualification": "PHD",
  "age": 29,
  "dob": "1996-08-14T00:00:00.000+00:00",
  "experience": 5,
  "school": {
    "id": 2,
    "schoolName": "St Pauls School",
    "schoolAddress": "Rajahmundry"
  }
}
```

15. Fetching teachers details by their Qualifications.



The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/teachers/getTeacherByQualification?qualification=MASTERS`
- Method:** GET
- Status:** 200 OK
- Time:** 34 ms
- Size:** 395 B

The response body is a JSON object:

```
{
  "id": 1,
  "teacherName": "Nivedha",
  "teacherAddress": "Kakinada",
  "qualification": "MASTERS",
  "age": 28,
  "dob": "1997-05-15T00:00:00.000+00:00",
  "experience": 2,
  "school": {
    "id": 1,
    "schoolName": "Future Kids School",
    "schoolAddress": "Vijayawada"
  }
}
```

16. Changing name of teacher from “kavya” to “vijay” using PATCH request.

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/teachers/changeTeacherDetails/2`
- Method:** PATCH
- Body (JSON):**

```
{  "teacherName": "Vijay",  "teacherAddress": "Vizag",  "qualification": "PHD",  "age": 29,  "dob": "1996-08-14",  "experience": 5,  "school": {    "id": 2  }}
```
- Status:** 200 OK, Time: 95 ms, Size: 382 B
- Response Body (JSON):**

```
{  "id": 2,  "teacherName": "Vijay",  "teacherAddress": "Vizag",  "qualification": "PHD",  "age": 29,  "dob": "1996-08-14T00:00:00.000+00:00",  "experience": 5,  "school": {    "id": 2,    "schoolName": "St Pauls School",    "schoolAddress": "Rajahmundry"  }}
```

17. Creating a teacher for delete purpose.

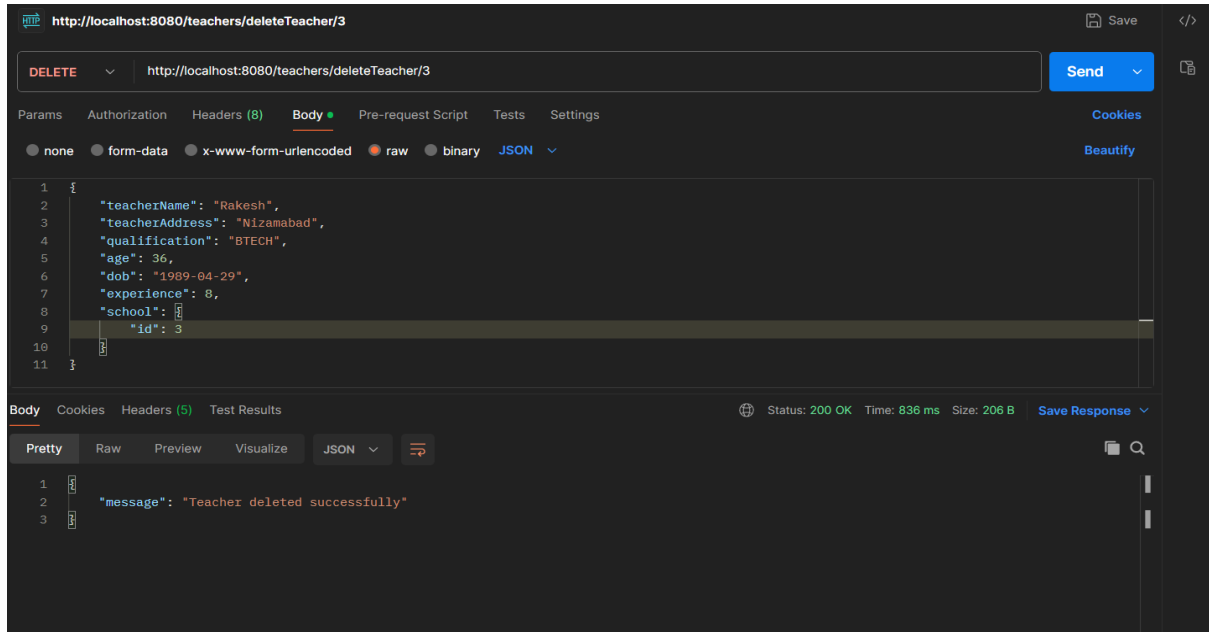
The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost:8080/teachers/addNewTeacher`
- Method:** POST
- Body (JSON):**

```
{  "teacherName": "Rakesh",  "teacherAddress": "Nizamabad",  "qualification": "BTECH",  "age": 36,  "dob": "1989-04-29",  "experience": 8,  "school": {    "id": 3  }}
```
- Status:** 200 OK, Time: 52 ms, Size: 387 B
- Response Body (JSON):**

```
{  "id": 3,  "teacherName": "Rakesh",  "teacherAddress": "Nizamabad",  "qualification": "BTECH",  "age": 36,  "dob": "1989-04-29T00:00:00.000+00:00",  "experience": 8,  "school": {    "id": 3,    "schoolName": "Bhashyam School",    "schoolAddress": "Hyderabad"  }  }
```


18. Deleted the Teacher by their IDs.



DELETE `http://localhost:8080/teachers/deleteTeacher/3` Send

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary JSON

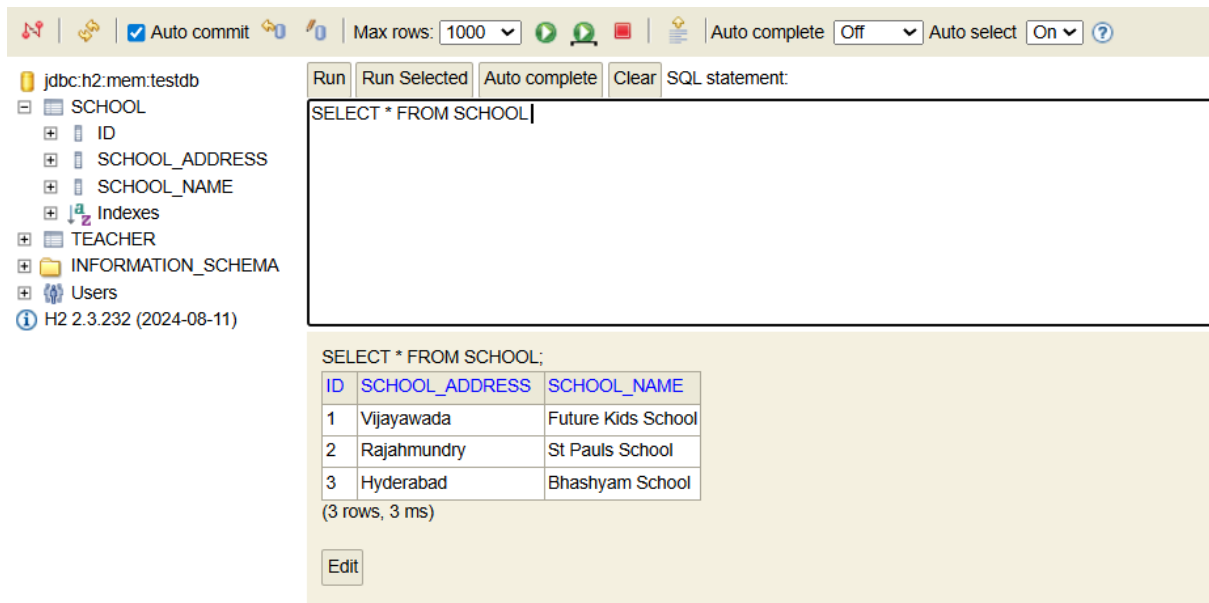
```
1 {
2   "teacherName": "Rakesh",
3   "teacherAddress": "Nizamabad",
4   "qualification": "BTECH",
5   "age": 36,
6   "dob": "1989-04-29",
7   "experience": 8,
8   "school": {
9     "id": 3
10  }
11 }
```

Body Cookies Headers (5) Test Results Status: 200 OK Time: 836 ms Size: 206 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "Teacher deleted successfully"
3 }
```

19. School Data in Hibernate Database



Auto commit Max rows: 1000 Auto complete Off Auto select On

jdbc:h2:mem:testdb

- SCHOOL
 - ID
 - SCHOOL_ADDRESS
 - SCHOOL_NAME
 - Indexes
- TEACHER
- INFORMATION_SCHEMA
- Users

H2 2.3.232 (2024-08-11)

Run Run Selected Auto complete Clear SQL statement:

SELECT * FROM SCHOOL

SELECT * FROM SCHOOL;

ID	SCHOOL_ADDRESS	SCHOOL_NAME
1	Vijayawada	Future Kids School
2	Rajahmundry	St Pauls School
3	Hyderabad	Bhashyam School

(3 rows, 3 ms)

Edit

20. Teacher Data in Hibernet Database

jdbc:h2:mem:testdb

SCHOOL

- ID
- SCHOOL_ADDRESS
- SCHOOL_NAME
- Indexes

TEACHER

- ID
- AGE
- DOB
- EXPERIENCE
- QUALIFICATION
- TEACHER_ADDRESS
- TEACHER_NAME
- SCHOOL_ID
- Indexes

INFORMATION_SCHEMA

Users

H2 2.3.232 (2024-08-11)

Run Run Selected Auto complete Clear SQL statement:

SELECT * FROM TEACHER

SELECT * FROM TEACHER;

ID	AGE	DOB	EXPERIENCE	QUALIFICATION	TEACHER_ADDRESS	TEACHER_NAME	SCHOOL_ID
1	28	1997-05-15 05:30:00	2	MASTERS	Kakinada	Nivedha	1
2	29	1996-08-14 05:30:00	5	PHD	Vizag	Vijay	2

(2 rows, 1 ms)

Edit

CONSOLE:

```
Console X Progress JUnit Coverage Git Staging Eclipse IDE for Enterprise Java and Web Developers 2025-09 M2
SchoolApplication - SchoolApplication [Spring Boot App] C:\Program Files\Java\jdk-21\bin\javaw.exe (10-Aug-2025, 5:55:51 pm elapsed: 0:00:24) [pid: 20764]
2025-08-10T17:55:57.035+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: de
2025-08-10T17:55:57.107+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM core version 6.6.22.Final
2025-08-10T17:55:57.160+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level cache disabled
2025-08-10T17:55:57.567+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: ignoring JPA class transfo
2025-08-10T17:55:57.611+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2025-08-10T17:55:57.856+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection conn0: url=jdbc:h2:
2025-08-10T17:55:57.859+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2025-08-10T17:55:57.938+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] org.hibernate.orm.connections.pooling : HHH10001005: Database info:
Database JDBC URL [Connecting through datasource 'HikariDataSource (HikariPool-1)']
Database driver: undefined/unknown
Database version: 2.3.232
Autocommit mode: undefined/unknown
Isolation level: undefined/unknown
Minimum pool size: undefined/unknown
Maximum pool size: undefined/unknown
2025-08-10T17:55:59.087+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA platform available (set 'hibernat
Hibernate: create table school (id bigint generated by default as identity, school_address varchar(255), school_name varchar(255), primary key (id))
Hibernate: create table teacher (id bigint generated by default as identity, age integer not null, dob timestamp(6), experience integer not null, qualification enum ('BTECH','MAS
Hibernate: alter table if exists teacher add constraint FKrg46bnmgbccayv14naymqg3r foreign key (school_id) references school
2025-08-10T17:55:59.184+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistenc
2025-08-10T17:55:59.505+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.d.j.r.query.QueryEnhancerFactory : Hibernate is in classpath; If applicable, HQL parse
2025-08-10T17:55:59.658+05:30 WARN 20764 --- [SchoolApplication] [ restartedMain] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Ther
2025-08-10T17:56:00.285+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.b.a.h2.H2ConsoleAutoConfiguration : H2 console available at '/h2-console'. Database ava
2025-08-10T17:56:00.334+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2025-08-10T17:56:00.345+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.b.a.e.web.EndpointLinksResolver : Exposing 1 endpoint beneath base path '/actuator'
2025-08-10T17:56:00.463+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8080 (http) with context pat
2025-08-10T17:56:00.480+05:30 INFO 20764 --- [SchoolApplication] [ restartedMain] com.knr.school.SchoolApplication : Started SchoolApplication in 6.348 seconds (process
2025-08-10T17:56:00.894+05:30 INFO 20764 --- [SchoolApplication] [on(4)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatcherSe
2025-08-10T17:56:00.894+05:30 INFO 20764 --- [SchoolApplication] [on(4)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2025-08-10T17:56:00.896+05:30 INFO 20764 --- [SchoolApplication] [on(4)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Completed initialization in 1 ms
```