Report: Database Schema Definition SQL Queries

TABLE: COLLEGES

```
CREATE TABLE colleges (
  id SERIAL PRIMARY KEY,
  name VARCHAR(100) NOT NULL UNIQUE
);
```

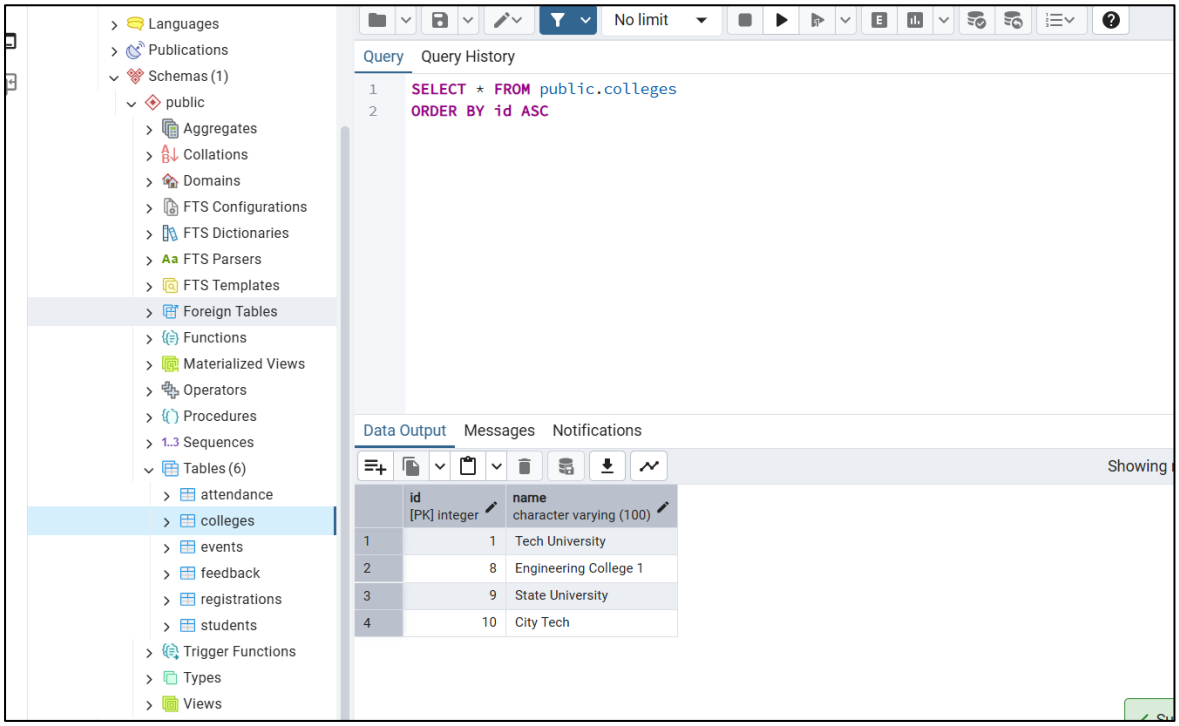


Fig.1: Table colleges

TABLE: STUDENTS

```
CREATE TABLE students (
  id SERIAL PRIMARY KEY,
  name VARCHAR(100) NOT NULL,
  college_id INTEGER NOT NULL,
  FOREIGN KEY (college_id) REFERENCES colleges(id) ON DELETE CASCADE
);
```

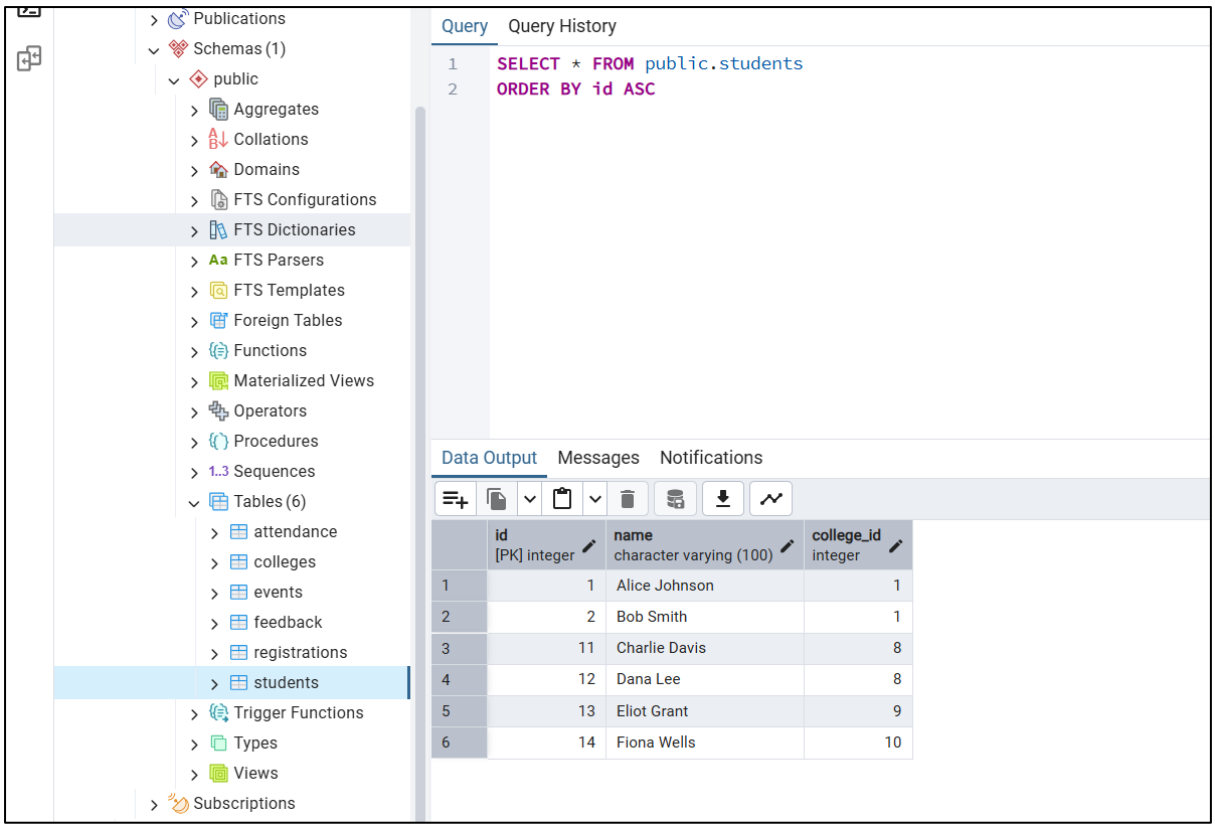


Fig.2: Table students

TABLE: EVENTS

CREATE TABLE events (

id **SERIAL PRIMARY KEY**,

name **VARCHAR**(100) NOT NULL,

type VARCHAR(50) NOT NULL,

date DATE NOT NULL,

college_id **INTEGER** NOT NULL,

FOREIGN KEY (college_id) **REFERENCES** colleges(id) **ON DELETE CASCADE**

);

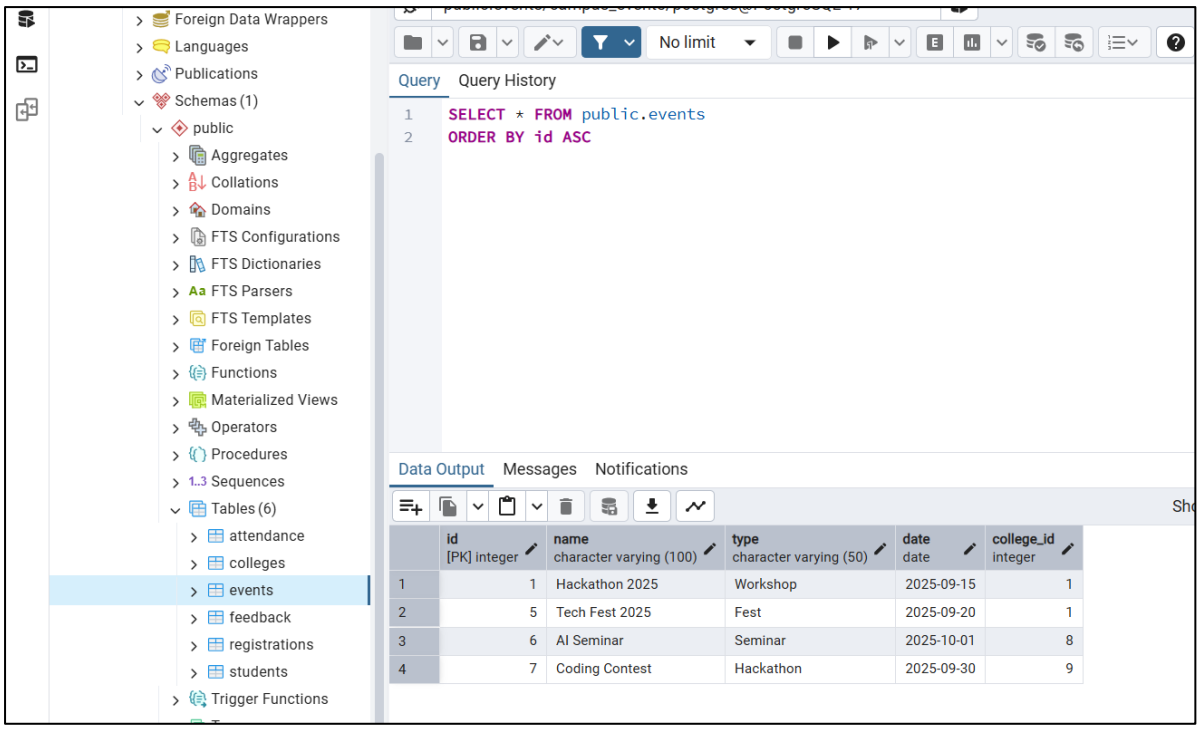


Fig.3: Table events

TABLE: REGISTRATIONS

```
CREATE TABLE registrations (
  id SERIAL PRIMARY KEY,
  student_id INTEGER NOT NULL,
  event_id INTEGER NOT NULL,
  UNIQUE(student_id, event_id),
  FOREIGN KEY (student_id) REFERENCES students(id) ON DELETE CASCADE,
  FOREIGN KEY (event_id) REFERENCES events(id) ON DELETE CASCADE
);
```

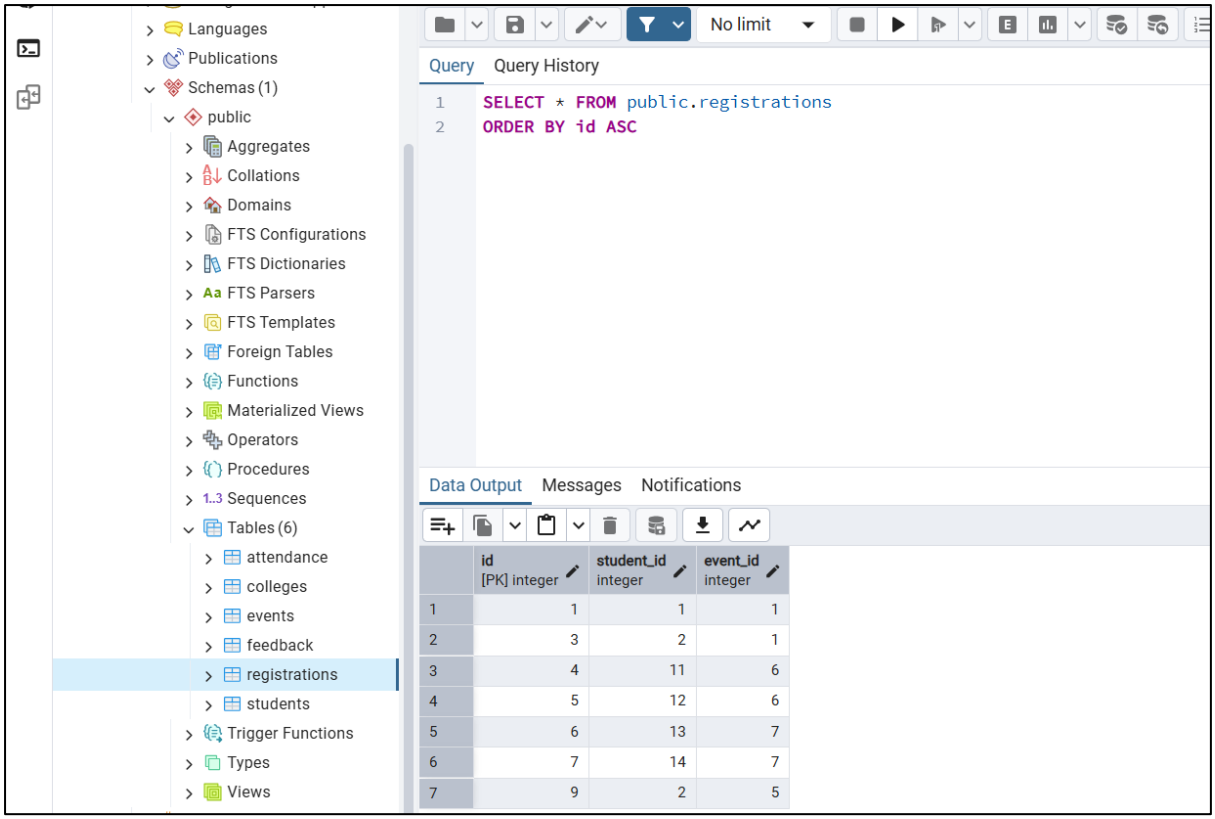


Fig.4: Table registrations

TABLE: ATTENDANCE

CREATE TABLE attendance (

id **SERIAL PRIMARY KEY**,

student_id **INTEGER** NOT NULL,

event_id **INTEGER** NOT NULL,

status BOOLEAN NOT NULL,

UNIQUE(student_id, event_id),

FOREIGN KEY (student_id) **REFERENCES** students(id) **ON DELETE CASCADE**,

FOREIGN KEY (event_id) **REFERENCES** events(id) **ON DELETE CASCADE**

);

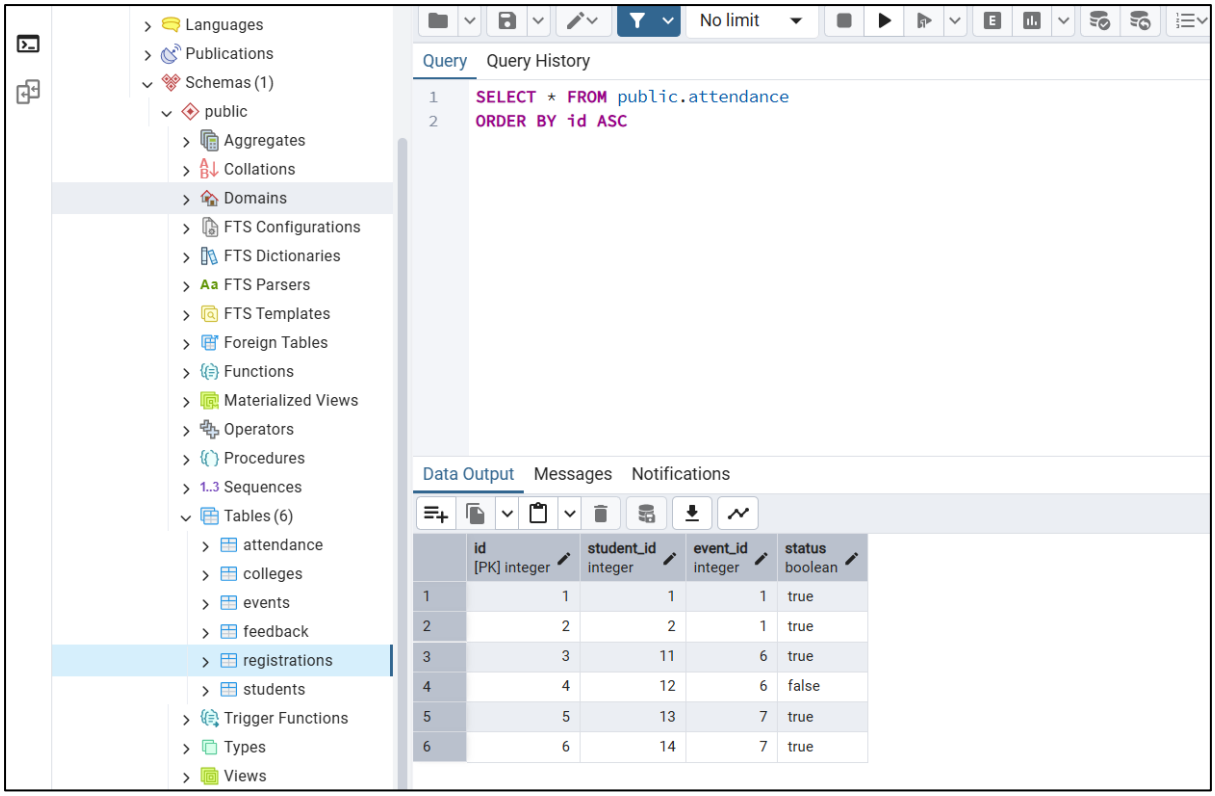


Fig.5: Table attendance

TABLE: FEEDBACK

CREATE TABLE feedback (

id **SERIAL PRIMARY KEY**,

student_id **INTEGER** NOT NULL,

event_id **INTEGER** NOT NULL,

rating **INTEGER** NOT NULL **CHECK** (rating BETWEEN 1 AND 5),

UNIQUE(student_id, event_id),

FOREIGN KEY (student_id) **REFERENCES** students(id) **ON DELETE CASCADE**,

FOREIGN KEY (event_id) **REFERENCES** events(id) **ON DELETE CASCADE**

);

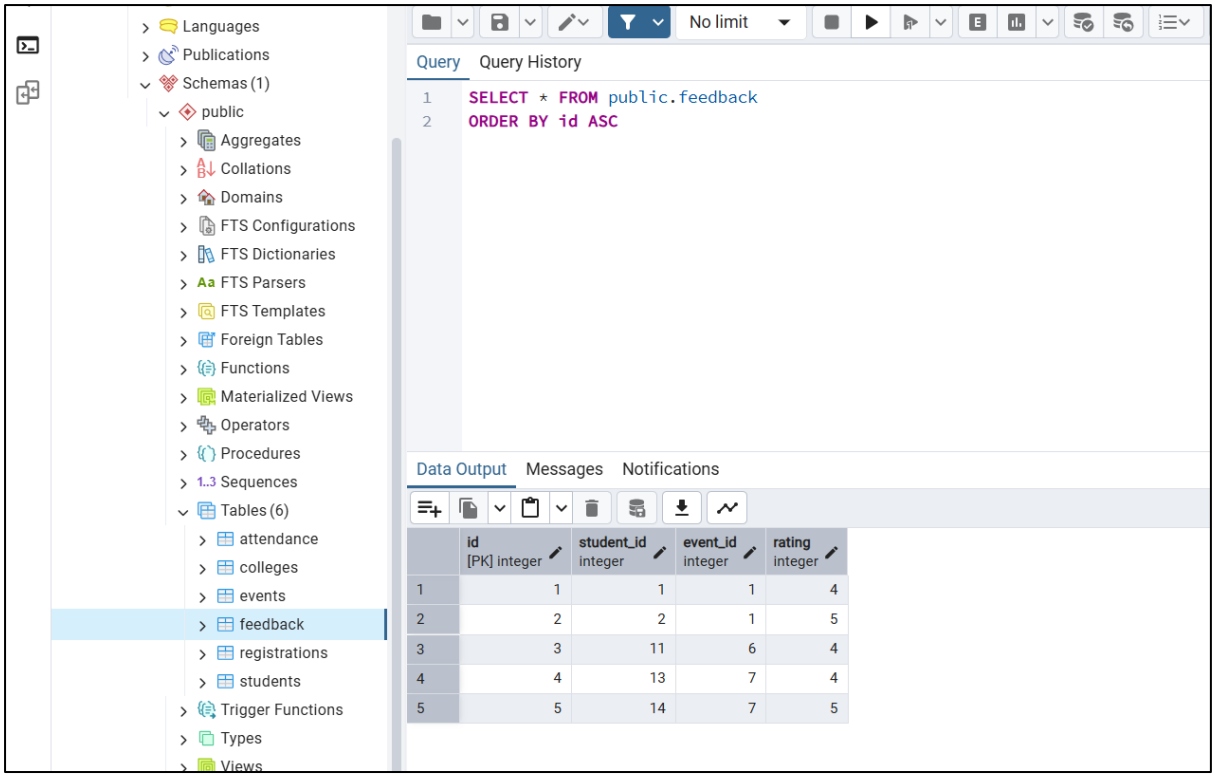
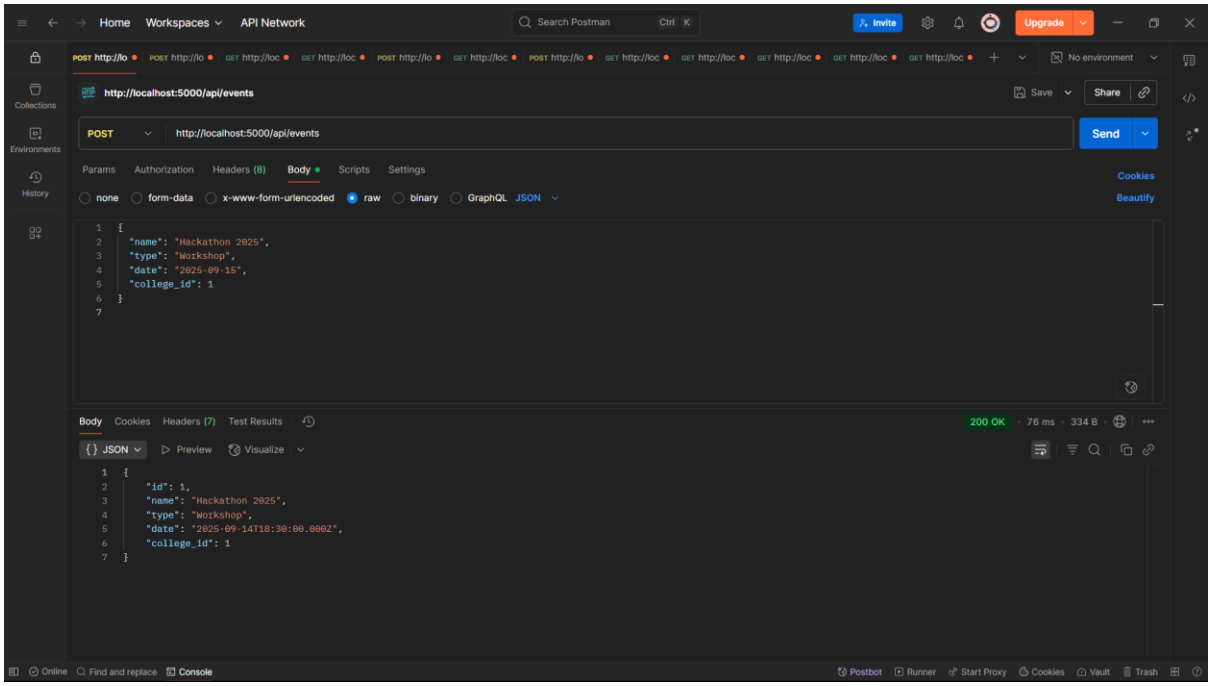
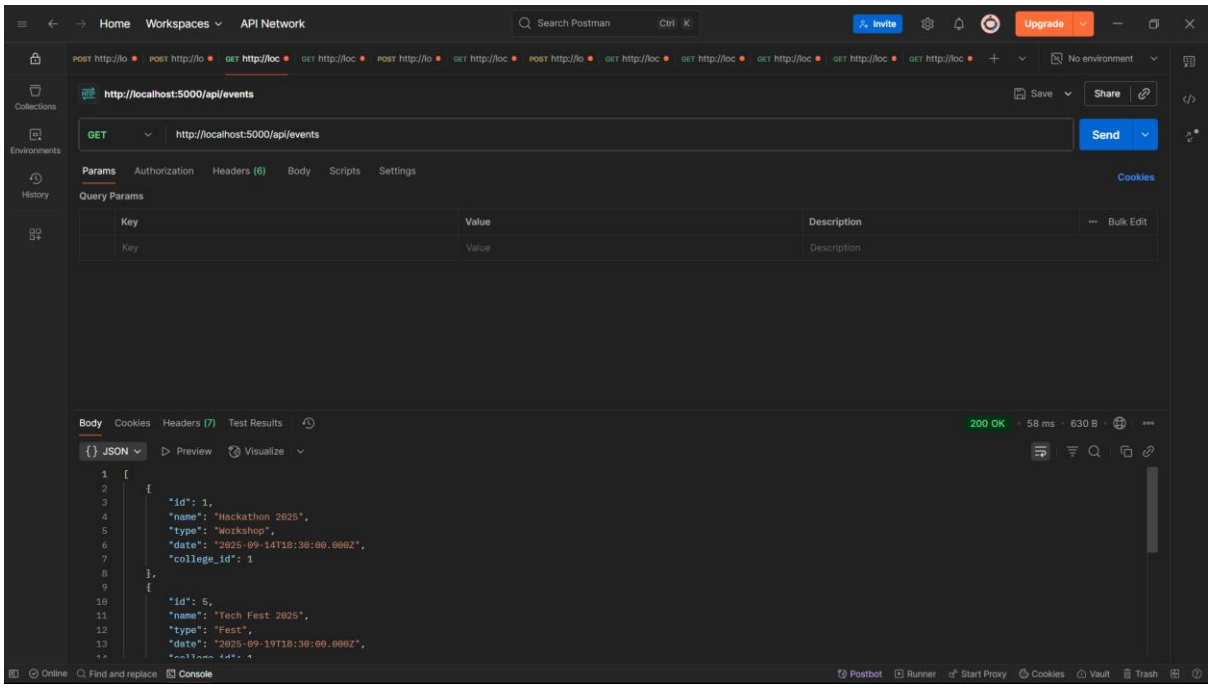


Fig.6: Table feedback

I have used **POSTMAN** for my API endpoints testing, below are the screenshots of the Requests and Responses. I have included the API calls in the design document, I'll be including the JSON responses under each image respectively.

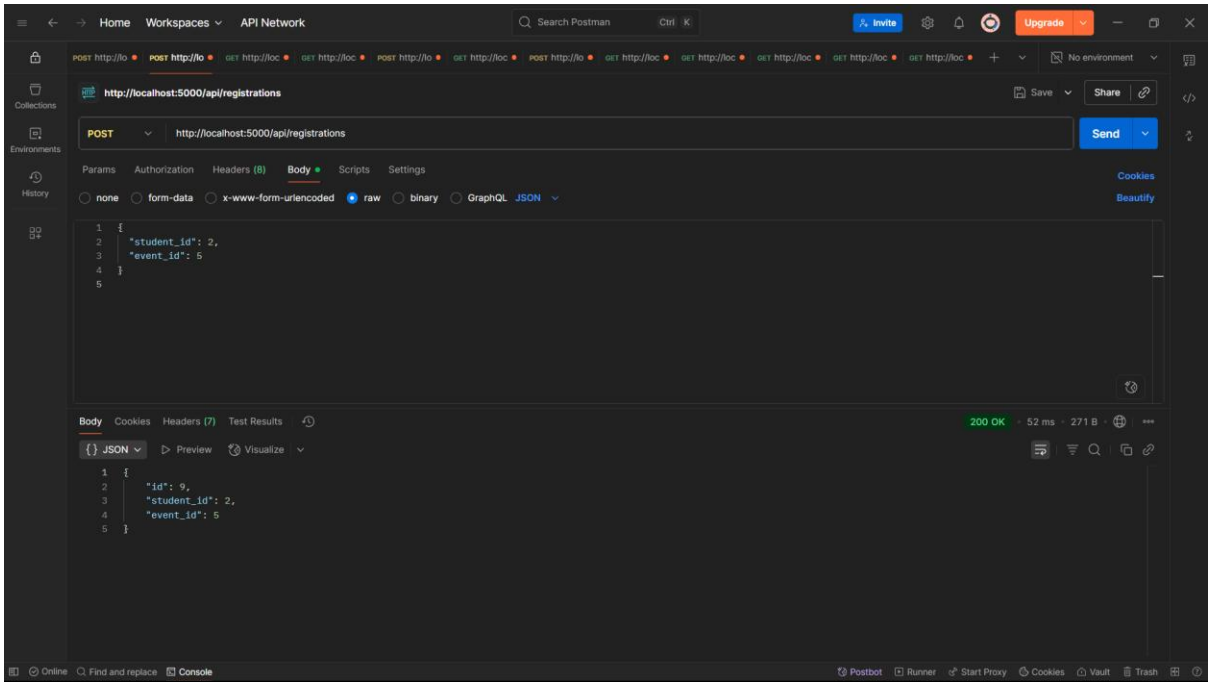


```
{
  "id": 1,
  "name": "Hackathon 2025",
  "type": "Workshop",
  "date": "2025-09-14T18:30:00.000Z",
  "college_id": 1
}
```

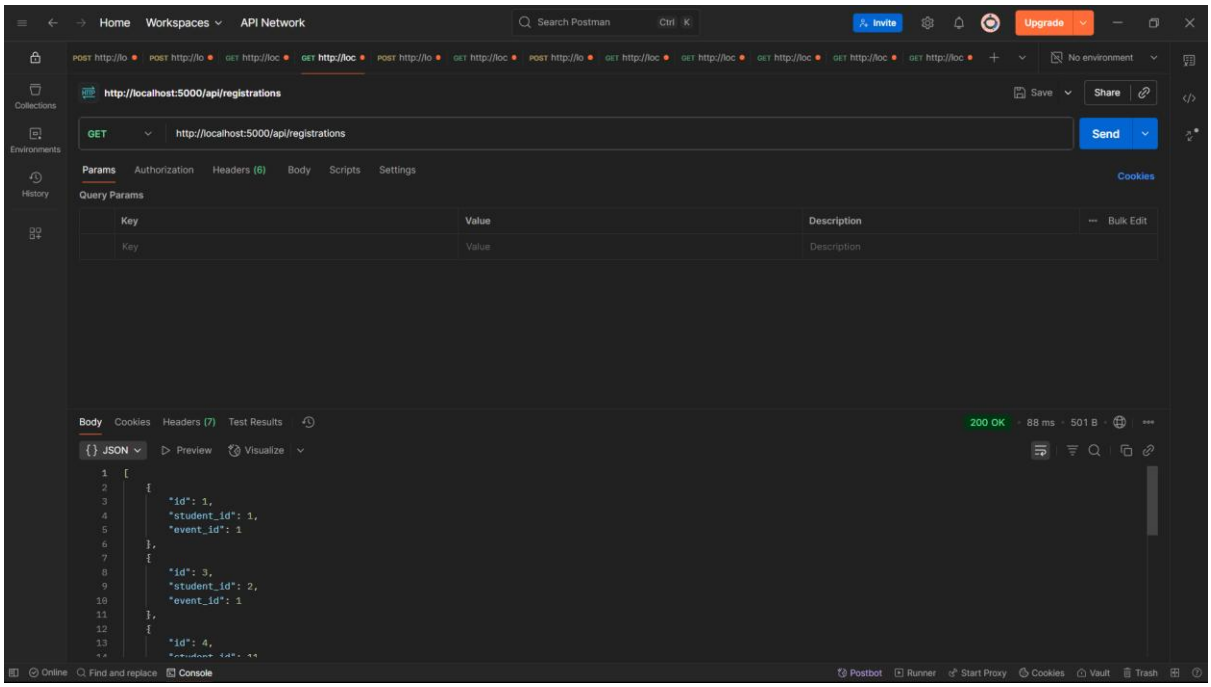



```
[
  {
    "id": 1,
    "name": "Hackathon 2025",
    "type": "Workshop",
    "date": "2025-09-14T18:30:00.000Z",
    "college_id": 1
  },
  {
    "id": 5,
    "name": "Tech Fest 2025",
    "type": "Fest",
```

```
    "date": "2025-09-19T18:30:00.000Z",
    "college_id": 1
  },
  {
    "id": 6,
    "name": "AI Seminar",
    "type": "Seminar",
    "date": "2025-09-30T18:30:00.000Z",
    "college_id": 8
  },
  {
    "id": 7,
    "name": "Coding Contest",
    "type": "Hackathon",
    "date": "2025-09-29T18:30:00.000Z",
    "college_id": 9
  }
]
```

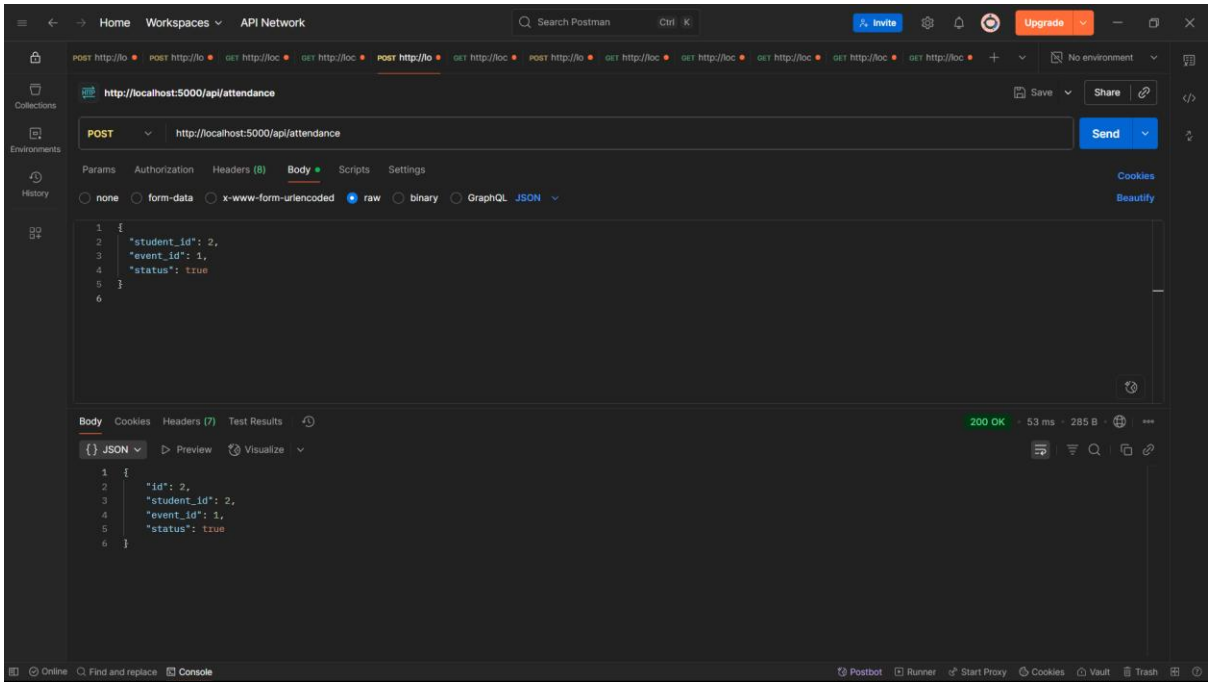


```
{
  "id": 9,
  "student_id": 2,
  "event_id": 5
}
```

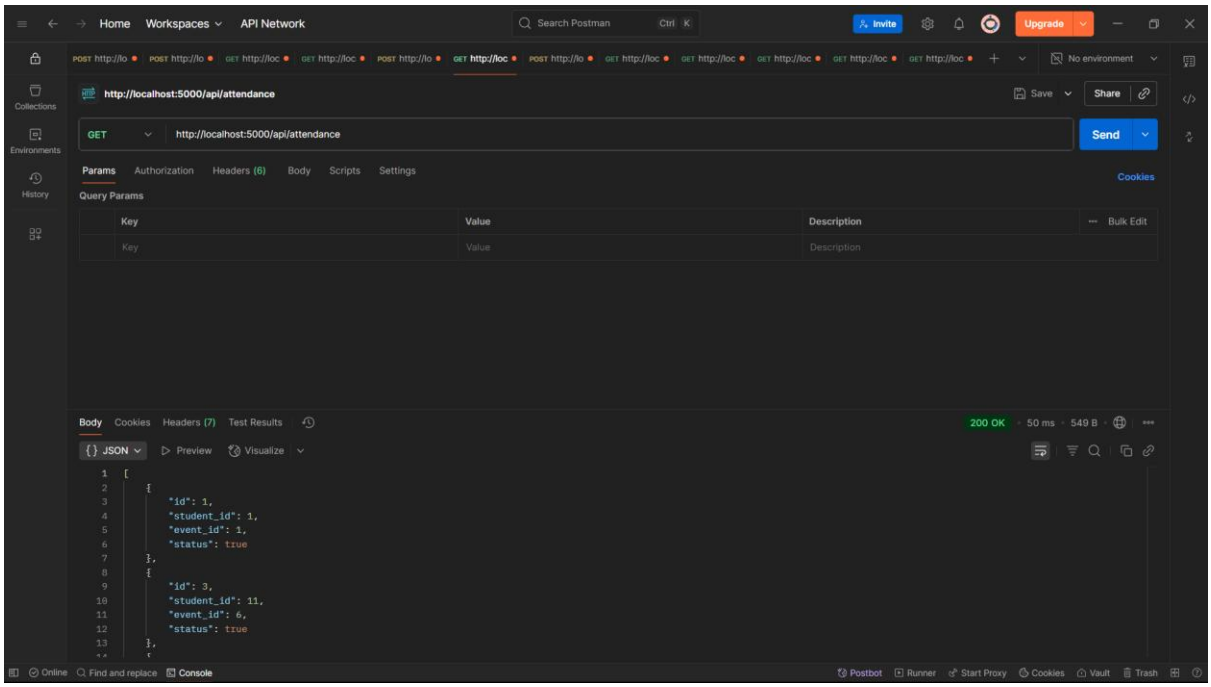



```
[
  {
    "id": 1,
    "student_id": 1,
    "event_id": 1
  },
  {
    "id": 3,
    "student_id": 2,
    "event_id": 1
  },
  {
    "id": 4,
    "student_id": 11,
```

```
    "event_id": 6
  },
  {
    "id": 5,
    "student_id": 12,
    "event_id": 6
  },
  {
    "id": 6,
    "student_id": 13,
    "event_id": 7
  },
  {
    "id": 7,
    "student_id": 14,
    "event_id": 7
  },
  {
    "id": 9,
    "student_id": 2,
    "event_id": 5
  }
]
```



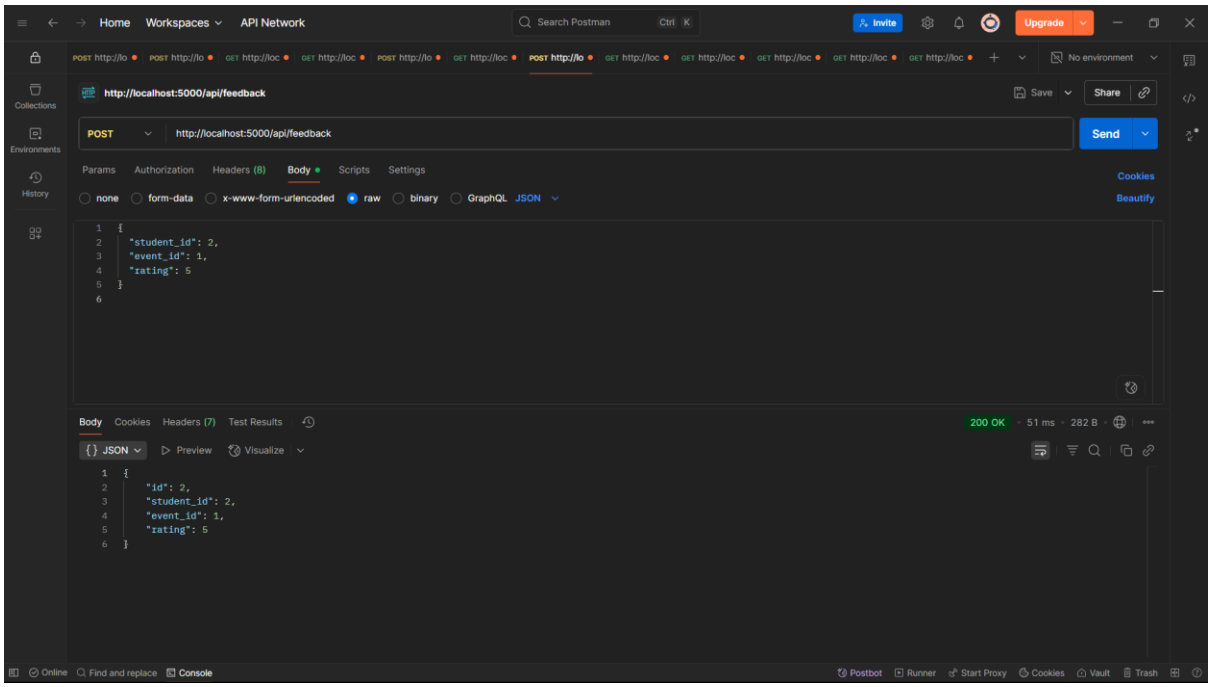

```
{
  "id": 2,
  "student_id": 2,
  "event_id": 1,
  "status": true
}
```



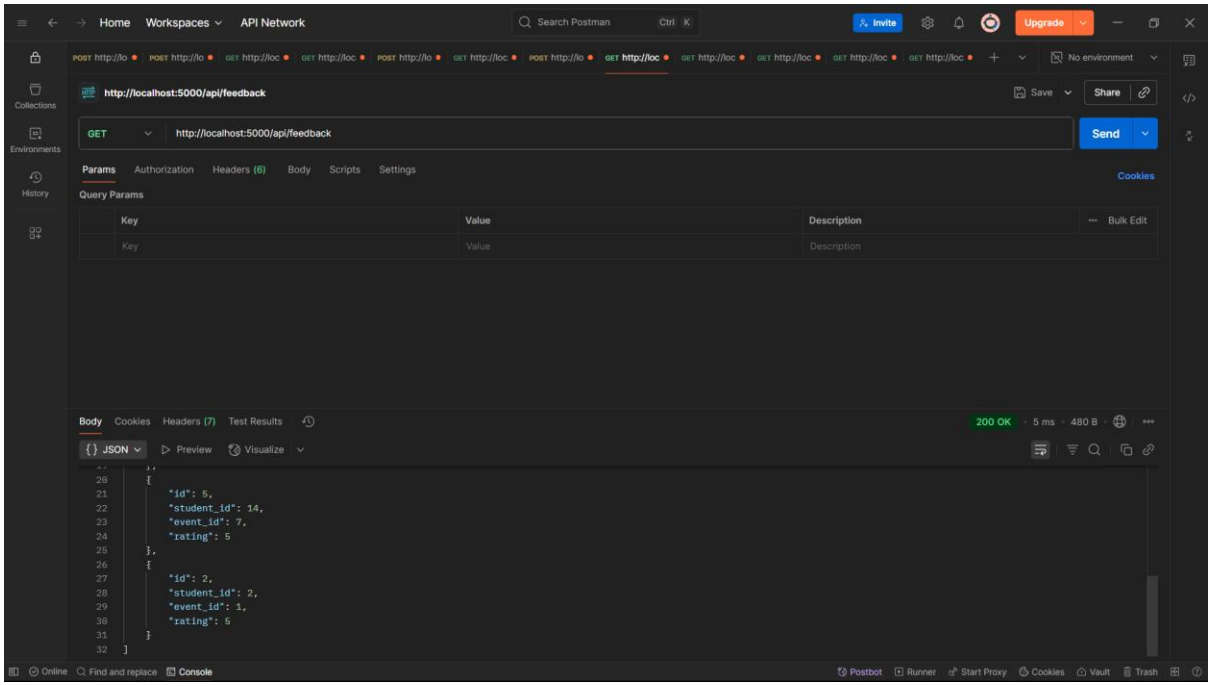

```
[
```

```
{
    "id": 1,
    "student_id": 1,
    "event_id": 1,
    "status": true
},
{
    "id": 3,
    "student_id": 11,
    "event_id": 6,
    "status": true
},
{
    "id": 4,
    "student_id": 12,
    "event_id": 6,
    "status": false
},
{
    "id": 5,
    "student_id": 13,
    "event_id": 7,
    "status": true
},
{
    "id": 6,
    "student_id": 14,
    "event_id": 7,
    "status": true
},
{
    "id": 2,
```

```
    "student_id": 2,
    "event_id": 1,
    "status": true
  }
]
```

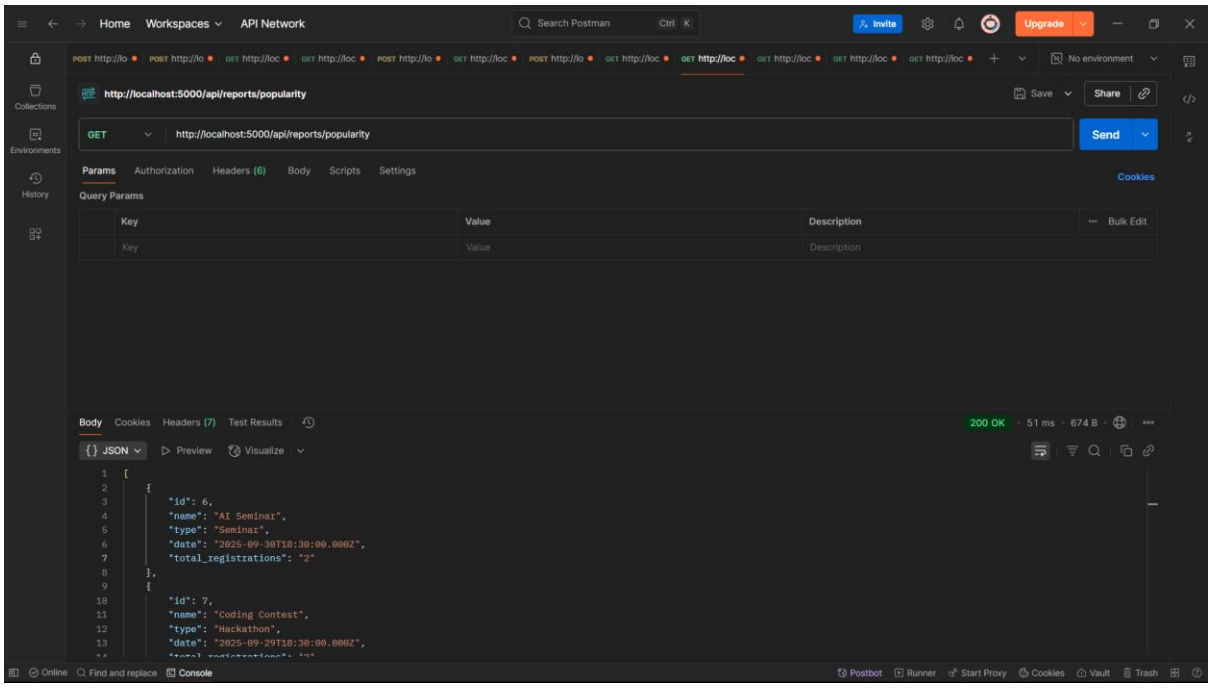



```
{
  "id": 2,
  "student_id": 2,
  "event_id": 1,
  "rating": 5
}
```



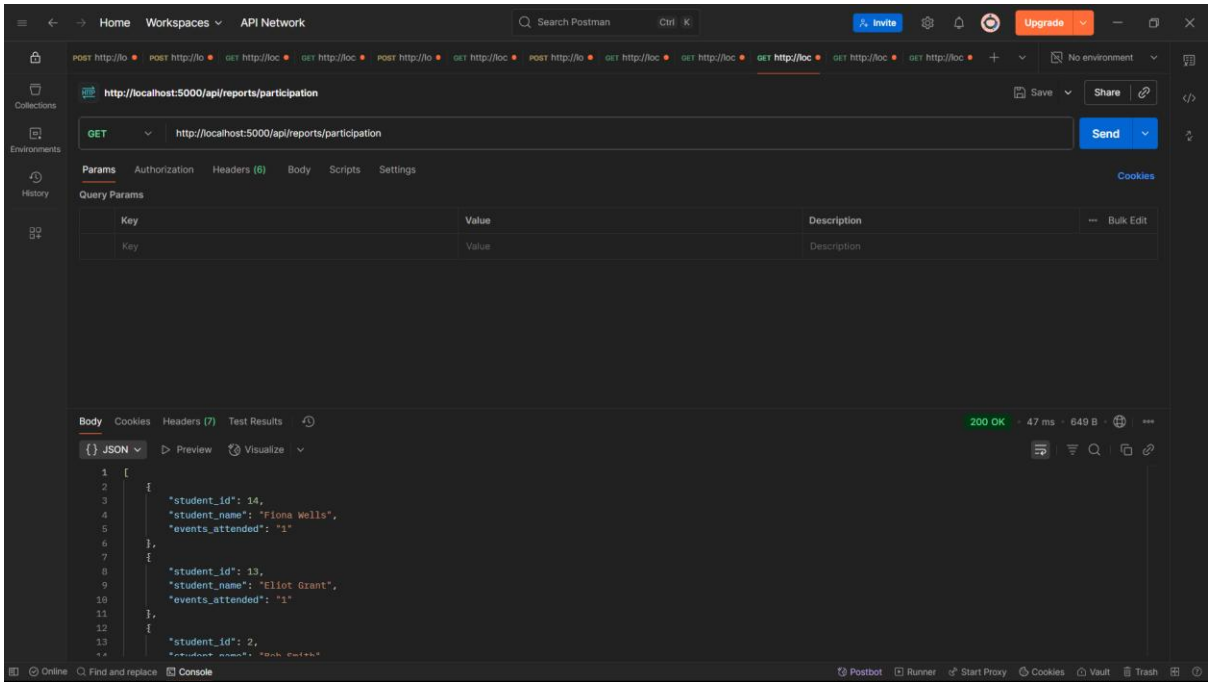

```
[
  {
    "id": 1,
    "student_id": 1,
    "event_id": 1,
    "rating": 4
  },
  {
    "id": 3,
    "student_id": 11,
    "event_id": 6,
    "rating": 4
  },
  {
    "id": 4,
    "student_id": 13,
    "event_id": 7,
    "rating": 4
  },
  {
```

```
    "id": 5,
    "student_id": 14,
    "event_id": 7,
    "rating": 5
  },
  {
    "id": 2,
    "student_id": 2,
    "event_id": 1,
    "rating": 5
  }
]
```



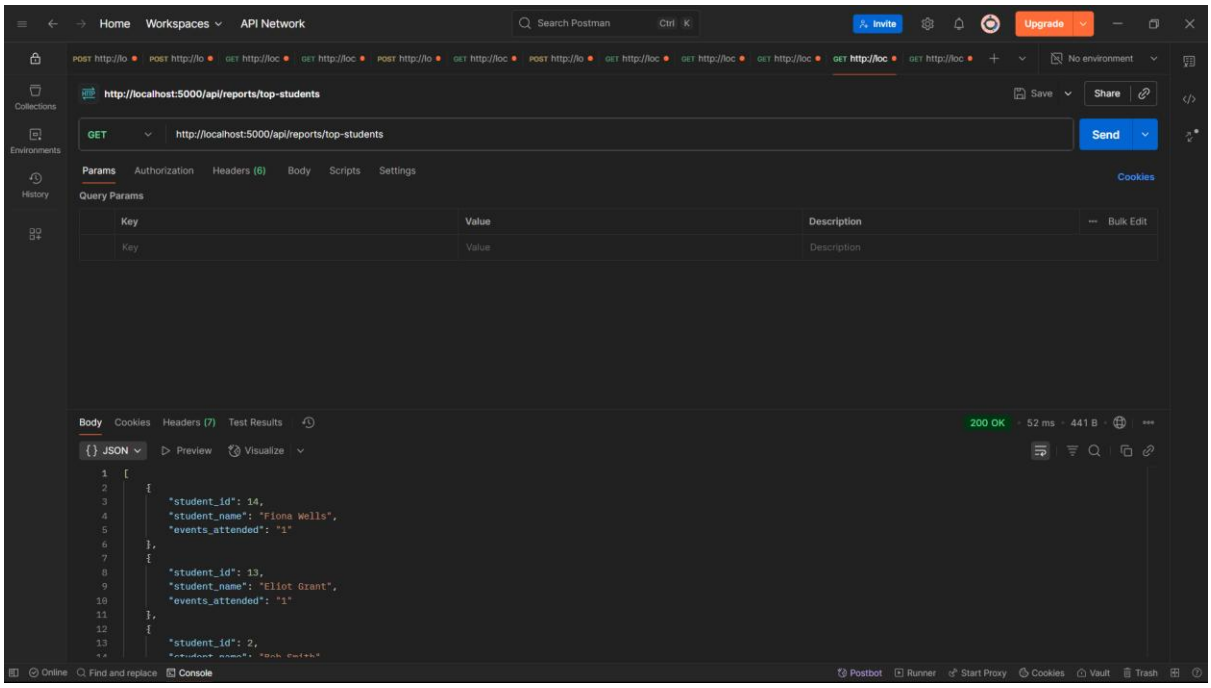

```
[
  {
    "id": 6,
    "name": "AI Seminar",
    "type": "Seminar",
    "date": "2025-09-30T18:30:00.000Z",
    "total_registrations": "2"
```

```
  },
  {
    "id": 7,
    "name": "Coding Contest",
    "type": "Hackathon",
    "date": "2025-09-29T18:30:00.000Z",
    "total_registrations": "2"
  },
  {
    "id": 1,
    "name": "Hackathon 2025",
    "type": "Workshop",
    "date": "2025-09-14T18:30:00.000Z",
    "total_registrations": "2"
  },
  {
    "id": 5,
    "name": "Tech Fest 2025",
    "type": "Fest",
    "date": "2025-09-19T18:30:00.000Z",
    "total_registrations": "1"
  }
]
```



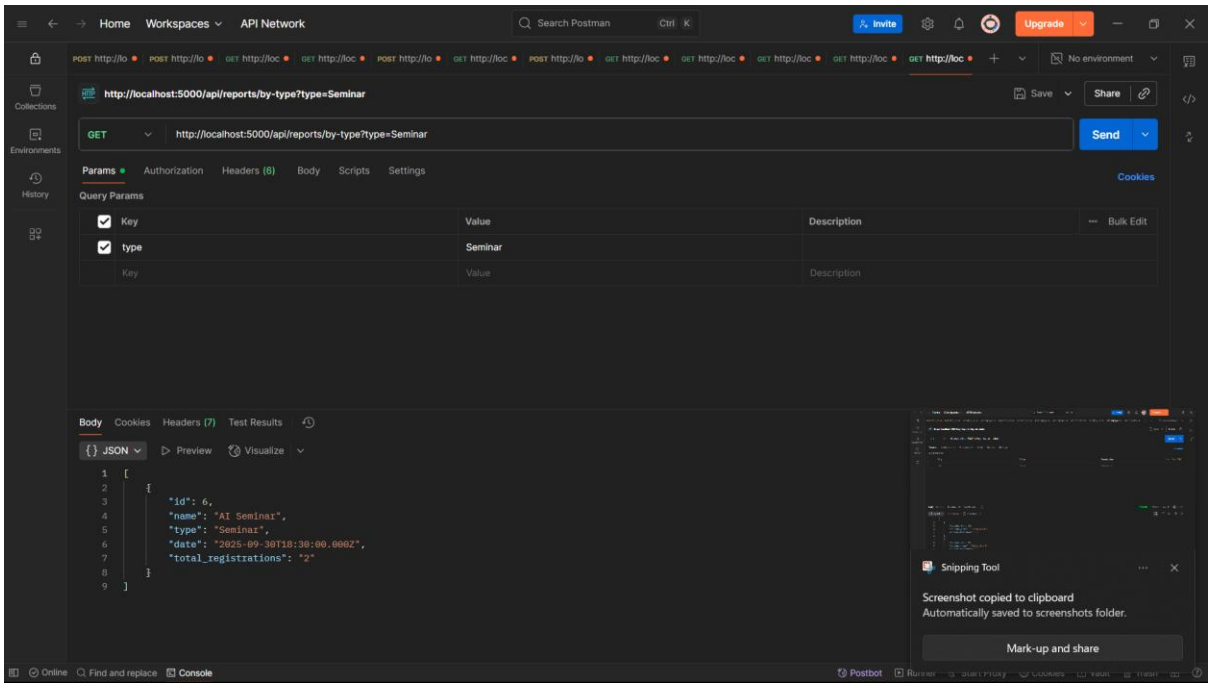

```
[
  {
    "student_id": 14,
    "student_name": "Fiona Wells",
    "events_attended": "1"
  },
  {
    "student_id": 13,
    "student_name": "Eliot Grant",
    "events_attended": "1"
  },
  {
    "student_id": 2,
    "student_name": "Bob Smith",
    "events_attended": "1"
  },
  {
    "student_id": 1,
    "student_name": "Alice Johnson",
    "events_attended": "1"
```

```
  },
  {
    "student_id": 11,
    "student_name": "Charlie Davis",
    "events_attended": "1"
  },
  {
    "student_id": 12,
    "student_name": "Dana Lee",
    "events_attended": "0"
  }
]
```

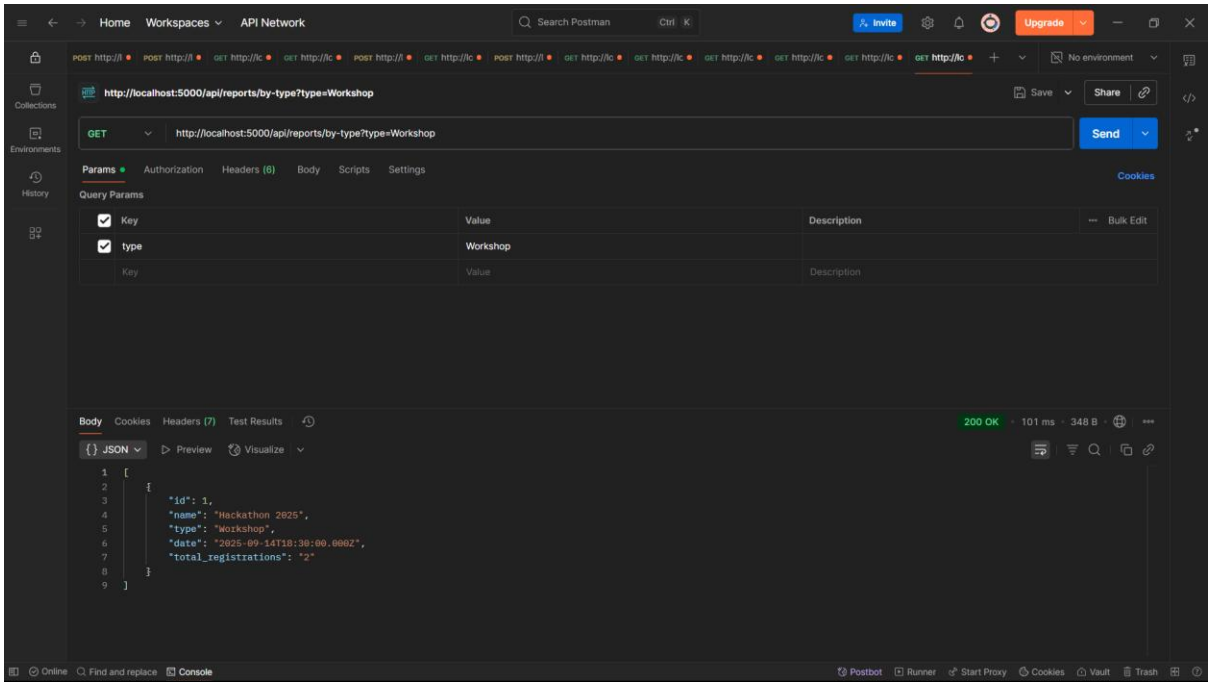



```
[
  {
    "student_id": 14,
    "student_name": "Fiona Wells",
    "events_attended": "1"
  },
  {
```

```
    "student_id": 13,
    "student_name": "Eliot Grant",
    "events_attended": "1"
  },
  {
    "student_id": 2,
    "student_name": "Bob Smith",
    "events_attended": "1"
  }
]
```




```
[
  {
    "id": 6,
    "name": "AI Seminar",
    "type": "Seminar",
    "date": "2025-09-30T18:30:00.000Z",
    "total_registrations": "2"
  }
]
```




```
[
  {
    "id": 1,
    "name": "Hackathon 2025",
    "type": "Workshop",
    "date": "2025-09-14T18:30:00.000Z",
    "total_registrations": "2"
  }
]
```