Ex. No. 8	Building a REST API with Express, Node, and MongoDB

CODE:

Server.js

```
require('dotenv').config()

const express = require('express')
const app = express()
const mongoose = require('mongoose')

mongoose.connect('mongodb://localhost:27017/subscribers', {
useNewUrlParser: true })
const db = mongoose.connection
db.on('error', (error) => console.error(error))
db.once('open', () => console.log('Connected to Database'))

app.use(express.json())

const subscribersRouter = require('./routes/subscribers')
app.use('/subscribers', subscribersRouter)

app.listen(3000, () => console.log('Server Started'))
```

Subscribers.js

```
const express = require('express')
const router = express.Router()
const Subscriber = require('../models/subscriber')

// Getting all
router.get('/', async (req, res) => {
    try {
      const subscribers = await Subscriber.find()
      res.json(subscribers)
    } catch (err) {
      res.status(500).json({ message: err.message })
    }
  })

  // Getting One
```

```
  router.get('/:id', getSubscriber, (req, res) => {
    res.json(res.subscriber)
  })

  // Creating one
  router.post('/', async (req, res) => {
    const subscriber = new Subscriber({
      name: req.body.name,
      subscribedToChannel: req.body.subscribedToChannel
    })
    try {
      const newSubscriber = await subscriber.save()
      res.status(201).json(newSubscriber)
    } catch (err) {
      res.status(400).json({ message: err.message })
    }
  })

  // Updating One
  router.patch('/:id', getSubscriber, async (req, res) => {
    if (req.body.name != null) {
      res.subscriber.name = req.body.name
    }
    if (req.body.subscribedToChannel != null) {
      res.subscriber.subscribedToChannel =
req.body.subscribedToChannel
    }
    try {
      const updatedSubscriber = await res.subscriber.save()
      res.json(updatedSubscriber)
    } catch (err) {
      res.status(400).json({ message: err.message })
    }
  })

  // Deleting One
  router.delete('/:id', getSubscriber, async (req, res) => {
    try {
      await res.subscriber.remove()
      res.json({ message: 'Deleted Subscriber' })
    } catch (err) {
      res.status(500).json({ message: err.message })
```

```
    }
  })

  async function getSubscriber(req, res, next) {
    let subscriber
    try {
      subscriber = await Subscriber.findById(req.params.id)
      if (subscriber == null) {
        return res.status(404).json({ message: 'Cannot find
subscriber' })
      }
    } catch (err) {
      return res.status(500).json({ message: err.message })
    }

    res.subscriber = subscriber
    next()
  }

module.exports = router
```

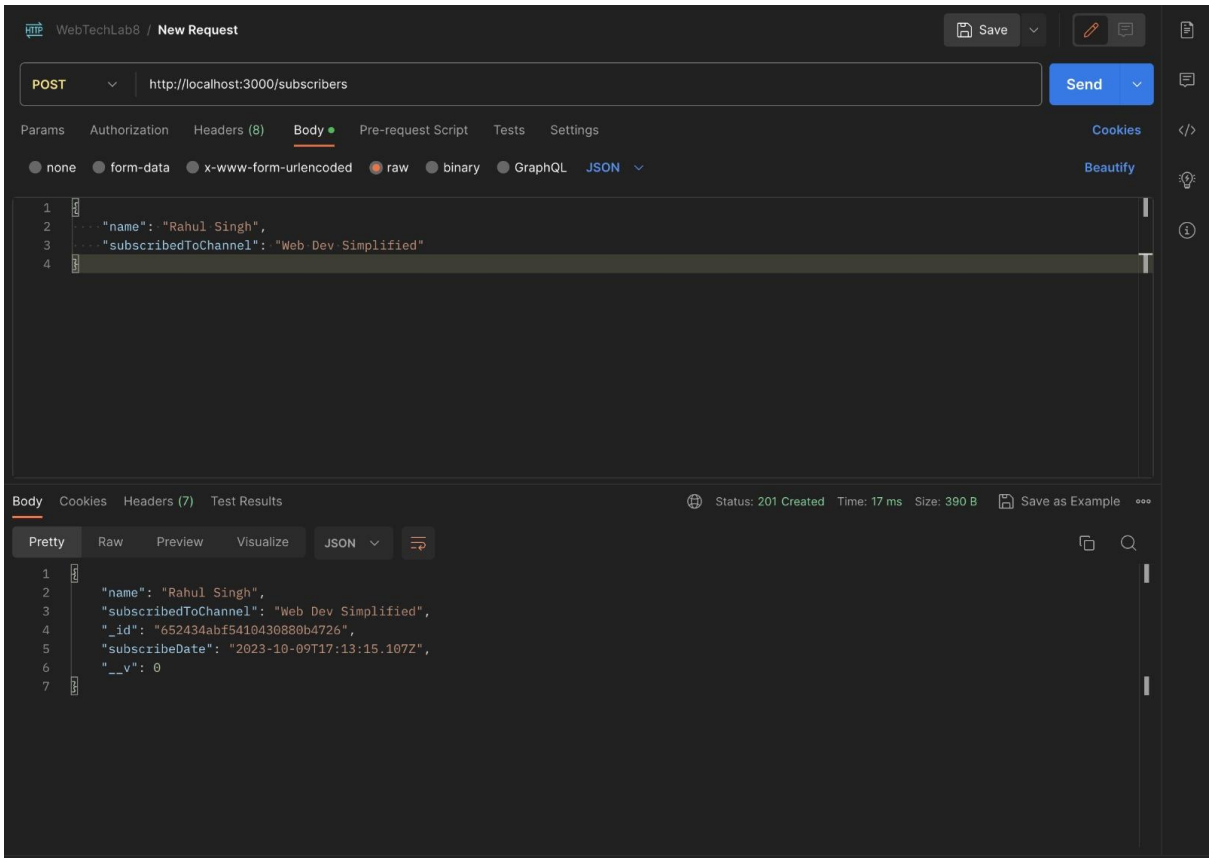
Subscriber.js

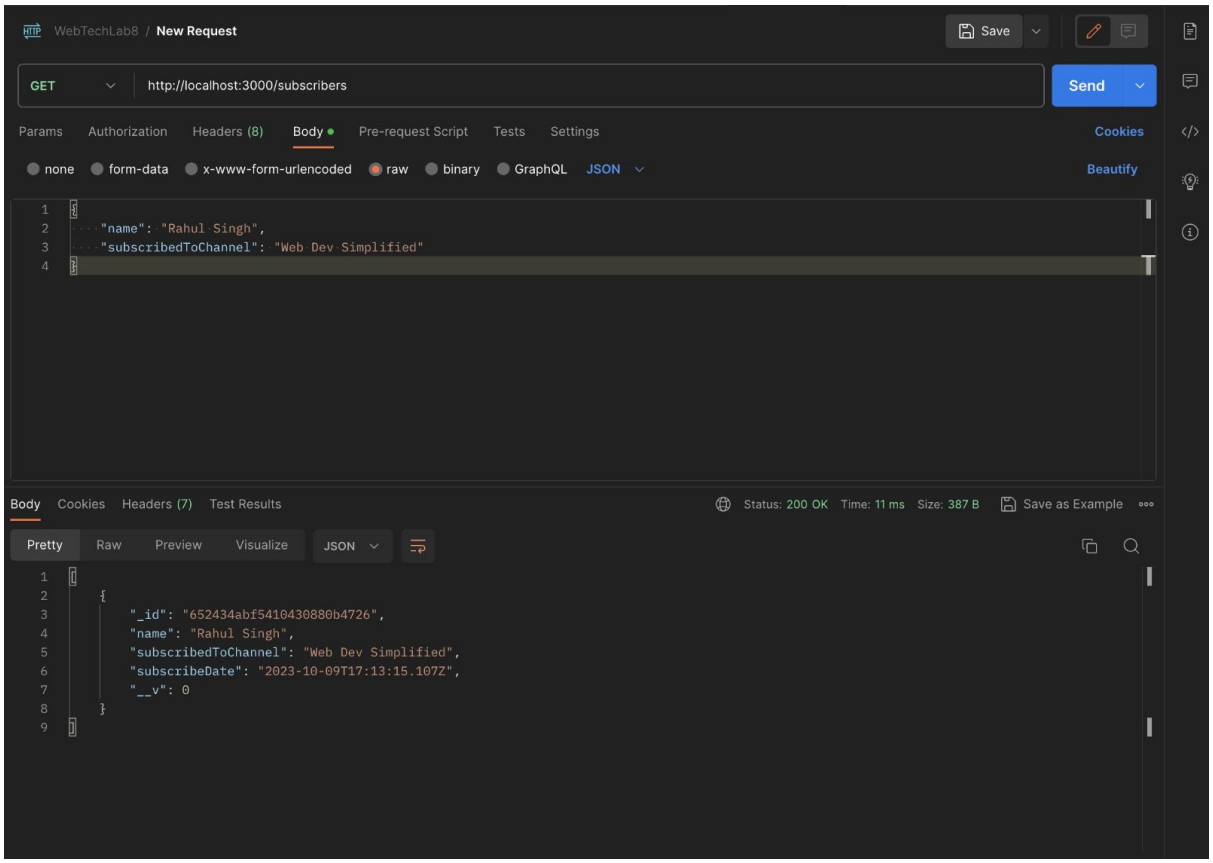
```
const mongoose = require('mongoose')

const subscriberSchema = new mongoose.Schema({
    name: {
        type: String,
        required: true
    },
    subscribedToChannel: {
        type: String,
        required: true
    },
    subscribeDate: {
        type: Date,
        required: true,
        default: Date.now
    }
})

module.exports = mongoose.model('Subscriber', subscriberSchema)
```

OUTPUT:


WebTechLab8 / New Request
Save
POST
http://localhost:3000/subscribers
Send
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies
none form-data x-www-form-urlencoded raw binary GraphQL JSON
Beautify
{
"name": "Rahul Singh",
"subscribedToChannel": "Web Dev Simplified"
}
Body Cookies Headers (7) Test Results
Status: 201 Created Time: 17 ms Size: 390 B
Save as Example
Pretty Raw Preview Visualize JSON
{
"name": "Rahul Singh",
"subscribedToChannel": "Web Dev Simplified",
"_id": "652434abf5410430880b4726",
"subscribeDate": "2023-10-09T17:13:15.107Z",
"__v": 0
}


WebTechLab8 / New Request
Save
GET
http://localhost:3000/subscribers
Send
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies
none form-data x-www-form-urlencoded raw binary GraphQL JSON
Beautify
{
"name": "Rahul Singh",
"subscribedToChannel": "Web Dev Simplified"
}
Body Cookies Headers (7) Test Results
Status: 200 OK Time: 11 ms Size: 387 B
Save as Example
Pretty Raw Preview Visualize JSON
[
{
"_id": "652434abf5410430880b4726",
"name": "Rahul Singh",
"subscribedToChannel": "Web Dev Simplified",
"subscribeDate": "2023-10-09T17:13:15.107Z",
"__v": 0
}
]