```
C:\WINDOWS\system32\cmd.exe                                     —    □    ×

E:\laboratorio>mkdir api-express-node-simple

E:\laboratorio>cd api-express-node-simple

E:\laboratorio\api-express-node-simple>npm init --yes
Wrote to E:\laboratorio\api-express-node-simple\package.json:

{
  "name": "api-express-node-simple",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}


E:\laboratorio\api-express-node-simple>mkdir src

E:\laboratorio\api-express-node-simple>code .
```
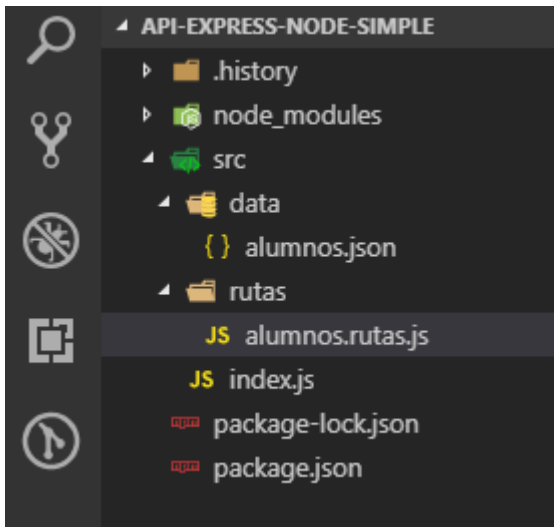
Módulos

```
C:\WINDOWS\system32\cmd.exe                                     —    □    ×

E:\laboratorio\api-express-node-simple>npm i express morgan
npm notice created a lockfile as package-lock.json. You should commit this file.
npm WARN api-express-node-simple@1.0.0 No description
npm WARN api-express-node-simple@1.0.0 No repository field.

+ morgan@1.9.1
+ express@4.16.4
added 51 packages from 36 contributors and audited 130 packages in 13.666s
found 0 vulnerabilities


E:\laboratorio\api-express-node-simple>_
```

/package.json

```json
{
  "name": "api-express-node-simple",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "start": "node src/."
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "express": "^4.16.4",
    "morgan": "^1.9.1"
  }
}
```

/src/data/alumnos.json

```json
[
    {
        "id": 1,
        "nombres": "Ana",
        "apellidos": "Gomez",
        "doc_identidad":123456
    }
]
```

/src/index.js

```js
const express = require('express');
const morgan = require('morgan');
const app = express();

// settings
app.set('port', process.env.PORT || 3000);

// middlewares
app.use(morgan('dev'));
app.use(express.urlencoded({extended: false}));
app.use(express.json());

// routes
app.use('/api-cognos/alumnos', require('./rutas/alumnos.rutas'));

// starting the server
app.listen(app.get('port'), () => {
    console.log(`Server on port ${app.get('port')}`);
});
```

/src/rutas/alumnos.rutas.js

```javascript
const { Router } = require('express');
const router = new Router();

const alumnos = require('../data/alumnos.json');

router.get('/', (req, res) => {
    res.json({estado:'OK',messaje:'',datos:alumnos});
});

router.get('/:id',(req,res)=>{
    const id = parseInt(req.params.id);
    const alumno = alumnos.find(alumno=>alumno.id===id);
    const datos = [];
    if(alumno){
        datos.push(alumno);
        res.json({estado:'OK',messaje:'',datos});
    }
    else res.json({estado:'ERROR',messaje:'no encontrado',datos});
})

router.post('/', (req, res) => {
    const id = alumnos.length + 1;
    const { nombres,apellidos,doc_identidad } = req.body;
    const alumno = alumnos.find(alumno=>alumno.doc_identidad===doc_identidad);
    if(alumno) res.json({estado:'ERROR',messaje:'alumno ya existe',datos:[]});
    else {
        alumnos.push({id,nombres,apellidos,doc_identidad});
        res.json({estado:'OK',messaje:'se inserto con exito',datos:[{ nom-
bres,apellidos,doc_identidad }]});
    }
});
```

```javascript
router.put('/:id', (req, res) => {
    const id  = parseInt(req.params.id);
    const { nombres,apellidos,doc_identidad } = req.body;
    const  index  = alumnos.findIndex(alumno=>alumno.id===id);
    if(index !== -1){
        alumnos[index] = {id,nombres,apellidos,doc_identidad};
        res.json({estado:'OK',messaje:'se actualizo con exito',datos:[{ nom-
bres,apellidos,doc_identidad }]});
    } else res.json({estado:'ERROR',messaje:'registro no encontrado',datos:[]});
});

router.delete('/:id', (req, res) => {
    const id  = parseInt(req.params.id);
    const  index  = alumnos.findIndex(alumno=>alumno.id===id);
    if(index !== -1){
        alumnos.splice(index,1);
        res.json({estado:'OK',messaje:'registro eliminado',datos:[]});
    } else res.json({estado:'ERROR',messaje:'registro no encontrado',datos:[]});
});

module.exports = router;
```

```
npm                                                        —    □    ×

E:\laboratorio\api-express-node-simple>npm start

> api-express-node-simple@1.0.0 start E:\laboratorio\api-express-node-simple
> node src/.

Server on port 3000
GET /api-cognos/alumnos/ 200 4.468 ms - 106
POST /api-cognos/alumnos 200 15.718 ms - 121
POST /api-cognos/alumnos 200 0.718 ms - 121
POST /api-cognos/alumnos 200 0.411 ms - 126
GET /api-cognos/alumnos/ 200 0.320 ms - 321
GET /api-cognos/alumnos/3 200 0.837 ms - 108
POST /api-cognos/alumnos 200 0.462 ms - 123
GET /api-cognos/alumnos/3 200 0.260 ms - 108
GET /api-cognos/alumnos/ 200 0.234 ms - 393
```

```
GET        ▼    http://localhost:3000/api-cognos/alumnos/
```

Pretty   Raw   Preview   JSON ▼   ⇥

```
 1 ▾ {
 2       "estado": "OK",
 3       "messaje": "",
 4 ▾     "datos": [
 5 ▾         {
 6               "id": 1,
 7               "nombres": "Ana",
 8               "apellidos": "Gomez",
 9               "doc_identidad": 123456
10         },
11 ▾         {
12               "id": 2,
13               "nombres": "Jorge",
14               "apellidos": "Chavez",
15               "doc_identidad": 451278
16         },
17 ▾         {
18               "id": 3,
19               "nombres": "Luis",
20               "apellidos": "Galves",
21               "doc_identidad": 344566
22         }
23     ]
24 }
```

POST ▼ http://localhost:3000/api-cognos/alumnos

Params   Authorization   Headers (1)   Body ●   Pre-request Script   Tests

● none   ● form-data   ● x-www-form-urlencoded   ● raw   ● binary   JSON (application/json) ▼

```
1 ▾ {
2            "nombres": "Jorge",
3            "apellidos": "Chavez",
4            "doc_identidad": 451278
5   }
```

Body   Cookies   Headers (6)   Test Results

Pretty   Raw   Preview   JSON ▼

```
1 ▾ {
2       "estado": "OK",
3       "messaje": "se inserto con exito",
4 ▾     "datos": [
5 ▾         {
6                 "nombres": "Jorge",
7                 "apellidos": "Chavez",
8                 "doc_identidad": 451278
9             }
10      ]
11  }
```

| GET | ▼ | http://localhost:3000/api-cognos/alumnos/2 |

Params   Authorization   Headers   **Body**   Pre-request Script   Tests

🔘 none   ⚪ form-data   ⚪ x-www-form-urlencoded   ⚪ raw   ⚪ binary

This request does not have a body

Body   Cookies   Headers (6)   Test Results

Pretty   Raw   Preview   JSON ▼   ⇉

```json
1  {
2      "estado": "OK",
3      "messaje": "",
4      "datos": [
5          {
6              "id": 2,
7              "nombres": "Jorge",
8              "apellidos": "Chavez",
9              "doc_identidad": 451278
10         }
11     ]
12  }
```

PUT ▼ http://localhost:3000/api-cognos/alumnos/3

Params   Authorization   Headers (1)   Body ●   Pre-request Script   Tests

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON (application/json) ▼

```
1 ▾ {
2          "nombres": "Luis",
3          "apellidos": "Arce",
4          "doc_identidad":344566
5   }
```

Body   Cookies   Headers (6)   Test Results

Pretty   Raw   Preview   JSON ▼   ⇆

```
1 ▾ {
2       "estado": "OK",
3       "messaje": "se actualizo con exito",
4 ▾     "datos": [
5 ▾         {
6                 "nombres": "Luis",
7                 "apellidos": "Arce",
8                 "doc_identidad": 344566
9             }
10     ]
11  }
```

DELETE   ▼   http://localhost:3000/api-cognos/alumnos/5

Params   Authorization   Headers   **Body**   Pre-request Script   Tests

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

This request does not have a body

Body   Cookies   Headers (6)   Test Results

Pretty   Raw   Preview   JSON ▼   ⇥

```
1  {
2      "estado": "OK",
3      "messaje": "registro eliminado",
4      "datos": []
5  }
```