```
~/Documents/CS/Code_Coverage_Example on main )   npm install --save-dev jest
```

```
> npm test -- --coverage

> code_coverage_example@1.0.0 test
> jest --coverage

 PASS  ./merge.test.js
  ✓ Merge sort with a empty list (1 ms)
  ✓ Merge sort with a list of a single element
  ✓ Merge sort with a list of two elements (1 ms)
  ✓ Merge sort with a list of sorted elements
  ✓ Merge sort with a list of where the first half is sorted
  ✓ Merge sort with a list of where the second half is sorted (1 ms)
  ✓ Merge sort where all elements are unsorted
```

File	% Stmts	% Branch	% Funcs	% Lines	Uncovered Line #s
All files	93.75	87.5	100	93.75	
merge.js	93.75	87.5	100	93.75	7

```
Test Suites: 1 passed, 1 total
Tests:       7 passed, 7 total
Snapshots:   0 total
Time:        0.129 s, estimated 1 s
Ran all test suites.

~/Documents/CS/Code_Coverage_Example > 
```
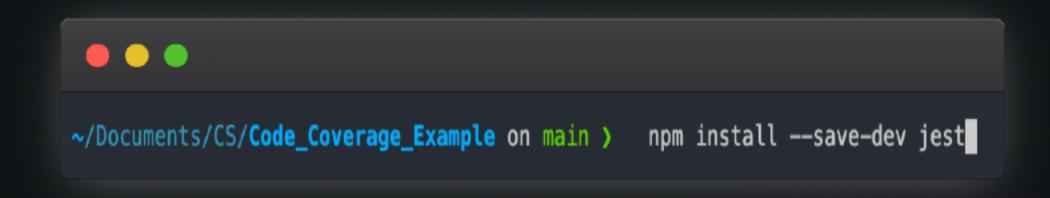
```json
{
  "name": "code_coverage_example",
  "version": "1.0.0",
  "description": "Example Code Example using Jest Code Coverage",
  "license": "ISC",
  "author": "Brian Kwong",
  "type": "commonjs",
  "main": "merge.js",
  ▷ Debug
  "scripts": {
    "test": "jest"        You, 52 minutes ago • Initial commit
  },
  "devDependencies": {
    "jest": "^29.7.0"
  }
}
```

Adding and Running the Code Coverage Module

```json
{
  "name": "code_coverage_example",
  "version": "1.0.0",
  "description": "Example Code Example using Jest Code Coverage",
  "license": "ISC",
  "author": "Brian Kwong",
  "type": "commonjs",
  "main": "merge.js",
  ▷ Debug
  "scripts": {
    "test": "jest"          You, 52 minutes ago • Initial commit
  },
  "devDependencies": {
    "jest": "^29.7.0"
  }
}
```

```
~/Documents/CS/Code_Coverage_Example on main )    npm install --save-dev jest
```

- Install Jest as a development-only dependency through npm

- Update your package.json with a test script pointing to Jest

- Run npm test — —coverage to generate code coverage for your Jest unit tests

```
> npm test -- --coverage

> code_coverage_example@1.0.0 test
> jest --coverage

PASS ./merge.test.js
  ✓ Merge sort with a empty list (1 ms)
  ✓ Merge sort with a list of a single element
  ✓ Merge sort with a list of two elements (1 ms)
  ✓ Merge sort with a list of sorted elements
  ✓ Merge sort with a list of where the first half is sorted
  ✓ Merge sort with a list of where the second half is sorted (1 ms)
  ✓ Merge sort where all elements are unsorted

----------|---------|----------|---------|---------|-------------------
File      | % Stmts | % Branch | % Funcs | % Lines | Uncovered Line #s
----------|---------|----------|---------|---------|-------------------
All files |   93.75 |     87.5 |     100 |   93.75 |
 merge.js |   93.75 |     87.5 |     100 |   93.75 | 7
----------|---------|----------|---------|---------|-------------------
Test Suites: 1 passed, 1 total
Tests:       7 passed, 7 total
Snapshots:   0 total
Time:        0.129 s, estimated 1 s
Ran all test suites.

~/Documents/CS/Code_Coverage_Example ⟩ ⬚
```