# Written questions

**1. Which part is the file extension of the package.json file?**

json

**2. What does JSON stand for?**

JavaScript Object Notation

**3. What is the purpose of JSON?**

JSON is basically a way of communicating data to someone, with very, very specific rules. Using Key Value Pairs and Arrays. It is a scripting notation for passing data about. In some ways an alternative to XML, natively supporting basic data types, arrays and associative arrays (name-value pairs, called Objects because that is what they represent).

**4. What does the package.json file do?**

The file holds various metadata relevant to the project. This file is used to give information to npm that allows it to identify the project as well as handle the project’s dependencies. It can also contain other metadata such as a project description, the version of the project in a particular distribution, license information, even configuration data – all of which can be vital to both npm and to the end users of the package. The package.json file is normally located at the root directory of a Node.js project.

**5. How do you install dependencies in a project after first cloning it from Github?**

npm install [dependencies]

**6. What does "forking" mean in the context of Github?**

A **fork is** a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project. Most commonly, **forks** are used to either propose changes to someone else's project or to use someone else's project as a starting point for your own idea.

**7. What data types do you know?**

These six types are considered to be primitives. A primitive is not an object and has no methods of its own. All primitives are immutable.

Boolean — true or false

Null — no value

Undefined — a declared variable but hasn’t been given a value

Number — integers, floats, etc

String — an array of characters i.e words

Symbol — a unique value that's not equal to any other value

**8. What is the difference between primitive and complex data types, and can you give examples of each?**

Some programming languages provide a complex data type for complex number storage and arithmetic as a built-in (primitive) data type.

In some programming environments the term complex data type (in contrast to primitive data types) is a synonym for the composite data type

In computer science, a composite data type or compound data type is any data type which can be constructed in a program using the programming language's primitive data types and other composite types. It is sometimes called a structure or aggregate data type,[1] although the latter term may also refer to arrays, lists, etc. The act of constructing a composite type is known as composition. Composite data types are often contrasted with scalar variables.

**9. What would be the best data type for representing whether a user is logged into the system or not?**

boolean

**10. How would you create a variable whose value could not be changed?**

const

**11. What would be the outcome of running this code?**

```javascript

const firstName = "Sandra";

function sayHello(name) {

console.log("Hello, " + firstName);

}

sayHello("Sally");

**Hello, Sandra**

console.log("Hello, " + name);

**12. What would be the outcome of running this code?**

```javascript

function getFullName(firstName, lastName) {

const fullName = firstName + " " + lastName;

return fullName;

}

const result = getFullname("Sally", "Jennings");

console.log(fullName);

**getFullname is not defined**

getFullName("Sally", "Jennings");

**13. If you wanted to see what dependencies were required in this project, where would you to to look for a list?**

package.json

**14. When you install dependencies, what directory is created?**

node\_modules

**15. How can you write comments in your code?**

a JavaScript comment block (also known as the multi-line comment) begins with \*/ , while a single line comment starts with //