Task 3

1.For the given JSON iterate over all for loops (for, for in, for of, forEach)

**For Loop:**

for (let i = 0; i < 5; i++) {  
  text += "The number is " + i + "<br>";  
}

Output:

The number is 0  
The number is 1  
The number is 2  
The number is 3  
The number is 4

**For In:**

const person = {fname:"John", lname:"Doe", age:25};  
  
let text = "";  
for (let x in person) {  
  text += person[x];  
}

Output:

John Doe 25

**For Of:**

const cars = ["BMW", "Volvo", "Mini"];  
  
let text = "";  
for (let x of cars) {  
  text += x;  
}

Output:

BMW  
Volvo  
Mini

**For Each:**

const fruits = ["apple", "orange", "cherry"];  
fruits.forEach(myFunction);

Output:

0: apple  
1: orange  
2: cherry

**2.Create your own resume data in JSON format.**

{

"#comment": "",

"html": {

"@lang": "en",

"head": {

"meta": [

{

"@charset": "utf-8"

},

{

"@content": "width=device-width, initial-scale=1.0",

"@name": "viewport"

},

{

"@content": "",

"@name": "description"

},

{

"@content": "",

"@name": "keywords"

}

],

"title": "iPortfolio Bootstrap Template - Index",

"#comment": [

"",

"",

"",

"",

""

],

"link": [

{

"@href": "assets/img/favicon.png",

"@rel": "icon"

},

{

"@href": "assets/img/apple-touch-icon.png",

"@rel": "apple-touch-icon"

},

{

"@href": "https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/aos/aos.css",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/bootstrap/css/bootstrap.min.css",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/bootstrap-icons/bootstrap-icons.css",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/boxicons/css/boxicons.min.css",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/glightbox/css/glightbox.min.css",

"@rel": "stylesheet"

},

{

"@href": "assets/vendor/swiper/swiper-bundle.min.css",

"@rel": "stylesheet"

},

{

"@href": "assets/css/style.css",

"@rel": "stylesheet"

}

]

},

"body": {

"#comment": [

"",

"",

"",

"",

"",

"",

"",

"",

"",

""

],

"i": {

"@class": "bi bi-list mobile-nav-toggle d-xl-none"

},

"header": {

"@id": "header",

"div": {

"@class": "d-flex flex-column",

"div": {

"@class": "profile",

"img": {

"@src": "assets/img/Anand/Anand photo.jpg",

"@alt": "",

"@class": "img-fluid rounded-circle"

},

"h1": {

"@class": "text-light",

"a": {

"@href": "index.html",

"#text": "Anandaraj K"

}

},

"div": {

"@class": "social-links mt-3 text-center",

"a": [

{

"@href": "https://twitter.com/AnandarajK20",

"@class": "twitter",

"i": {

"@class": "bx bxl-twitter"

}

},

{

"@href": "https://www.facebook.com/profile.php?id=100007401006373",

"@class": "facebook",

"i": {

"@class": "bx bxl-facebook"

}

},

{

"@href": "https://www.instagram.com/anand.\_k\_",

"@class": "instagram",

"i": {

"@class": "bx bxl-instagram"

}

},

{

"@href": "https://web.skype.com/AnandarajK",

"@class": "google-plus",

"i": {

"@class": "bx bxl-skype"

}

},

{

"@href": "https://linkedin.com/in/anandaraj-k-84208a15b",

"@class": "linkedin",

"i": {

"@class": "bx bxl-linkedin"

}

}

]

}

},

"nav": {

"@id": "navbar",

"@class": "nav-menu navbar",

"ul": {

"li": [

{

"a": {

"@href": "#hero",

"@class": "nav-link scrollto active",

"i": {

"@class": "bx bx-home"

},

"span": "Home"

}

},

{

"a": {

"@href": "#about",

"@class": "nav-link scrollto",

"i": {

"@class": "bx bx-user"

},

"span": "About"

}

},

{

"a": {

"@href": "#resume",

"@class": "nav-link scrollto",

"i": {

"@class": "bx bx-file-blank"

},

"span": "Resume"

}

},

{

"a": {

"@href": "#services",

"@class": "nav-link scrollto",

"i": {

"@class": "bx bx-server"

},

"span": "Services"

}

},

{

"a": {

"@href": "#contact",

"@class": "nav-link scrollto",

"i": {

"@class": "bx bx-envelope"

},

"span": "Contact"

}

}

],

"#comment": ""

}

},

"#comment": ""

}

},

"section": {

"@id": "hero",

"@class": "d-flex flex-column justify-content-center align-items-center",

"div": {

"@class": "hero-container",

"@data-aos": "fade-in",

"h1": "Anandaraj K",

"p": {

"span": {

"@class": "typed",

"@data-typed-items": "Designer, Developer, Freelancer, Photographer"

},

"#text": "I'm"

}

}

},

"main": {

"@id": "main",

"#comment": [

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

"",

""

],

"section": [

{

"@id": "about",

"@class": "about",

"div": {

"@class": "container",

"div": [

{

"@class": "section-title",

"h2": "About",

"#comment": ""

},

{

"@class": "row",

"div": [

{

"@class": "col-lg-4",

"@data-aos": "fade-right",

"img": {

"@src": "assets/img/Anand/Anand photo.jpg",

"@class": "img-fluid",

"@alt": ""

}

},

{

"@class": "col-lg-8 pt-4 pt-lg-0 content",

"@data-aos": "fade-left",

"h3": "Designer & Web Developer.",

"#comment": [

"",

""

],

"div": {

"@class": "row",

"div": [

{

"@class": "col-lg-6",

"ul": {

"li": [

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Birthday:",

"span": "08 August 1998"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Website:",

"span": "www.tut.net.in"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Phone:",

"span": "+91 8667728195"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "City:",

"span": "Tuticorin, Tamilnadu"

}

]

}

},

{

"@class": "col-lg-6",

"ul": {

"li": [

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Age:",

"span": "23"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Degree:",

"span": "Instrumentation Engineer"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Email:",

"span": "k.anandarajj@gmail.com"

},

{

"i": {

"@class": "bi bi-chevron-right"

},

"strong": "Freelance:",

"span": "Available"

}

]

}

}

]

}

}

]

}

]

}

},

{

"@id": "skills",

"@class": "skills section-bg",

"div": {

"@class": "container",

"div": [

{

"@class": "section-title",

"h2": "Skills",

"#comment": ""

},

{

"@class": "row skills-content",

"div": [

{

"@class": "col-lg-6",

"@data-aos": "fade-up",

"div": [

{

"@class": "progress",

"span": {

"@class": "skill",

"i": {

"@class": "val",

"#text": "90%"

},

"#text": "HTML"

},

"div": {

"@class": "progress-bar-wrap",

"div": {

"@class": "progress-bar",

"@role": "progressbar",

"@aria-valuenow": "90",

"@aria-valuemin": "0",

"@aria-valuemax": "100"

}

}

},

{

"@class": "progress",

"span": {

"@class": "skill",

"i": {

"@class": "val",

"#text": "75%"

},

"#text": "CSS"

},

"div": {

"@class": "progress-bar-wrap",

"div": {

"@class": "progress-bar",

"@role": "progressbar",

"@aria-valuenow": "75",

"@aria-valuemin": "0",

"@aria-valuemax": "100"

}

}

},

{

"@class": "progress",

"span": {

"@class": "skill",

"i": {

"@class": "val",

"#text": "75%"

},

"#text": "JavaScript"

},

"div": {

"@class": "progress-bar-wrap",

"div": {

"@class": "progress-bar",

"@role": "progressbar",

"@aria-valuenow": "75",

"@aria-valuemin": "0",

"@aria-valuemax": "100"

}

}

}

]

},

{

"@class": "col-lg-6",

"@data-aos": "fade-up",

"@data-aos-delay": "100",

"div": [

{

"@class": "progress",

"span": {

"@class": "skill",

"i": {

"@class": "val",

"#text": "80%"

},

"#text": "Python"

},

"div": {

"@class": "progress-bar-wrap",

"div": {

"@class": "progress-bar",

"@role": "progressbar",

"@aria-valuenow": "80",

"@aria-valuemin": "0",

"@aria-valuemax": "100"

}

}

},

{

"@class": "progress",

"span": {

"@class": "skill",

"i": {

"@class": "val",

"#text": "70%"

},

"#text": "Photoshop"

},

"div": {

"@class": "progress-bar-wrap",

"div": {

"@class": "progress-bar",

"@role": "progressbar",

"@aria-valuenow": "70",

"@aria-valuemin": "0",

"@aria-valuemax": "100"

}

}

}

],

"#comment": ""

}

]

}

]

}

},

{

"@id": "resume",

"@class": "resume",

"div": {

"@class": "container",

"div": [

{

"@class": "section-title",

"h2": "Resume",

"p": "To pursue a challenging career and be a part of progressive organization that gives a scope to enhance my knowledge and utilize skills towards the growth of the organization."

},

{

"@class": "row",

"div": [

{

"@class": "col-lg-6",

"@data-aos": "fade-up",

"h3": [

{

"@class": "resume-title",

"#text": "Summary"

},

{

"@class": "resume-title",

"#text": "Education"

}

],

"div": [

{

"@class": "resume-item pb-0",

"h4": "Anandaraj K",

"p": {

"em": "Innovative and deadline-driven Designer with experience in designing and developing user-centered digital/print marketing material from initial concept to final, polished deliverable."

},

"ul": {

"li": [

"Tuticorin, TN",

"+91 8667728195",

"k.anandarajj@gmail.com"

]

}

},

{

"@class": "resume-item",

"h4": "Bachelor of Electronics & Instrumentation",

"h5": "2016 - 2020",

"p": {

"em": "National Engineering College, Kovilpatti"

},

"#comment": ""

}

],

"#comment": ""

},

{

"@class": "col-lg-6",

"@data-aos": "fade-up",

"@data-aos-delay": "100",

"h3": {

"@class": "resume-title",

"#text": "Professional Experience"

},

"div": {

"@class": "resume-item",

"h4": "Calibration Engineer",

"h5": "2020 - Present",

"p": {

"em": "Hi-tech calibration services , Chennai, TN"

},

"ul": {

"li": [

"calibrating instrument variables like Dimension, Thermal, Mechanical, Electro-Technical and Force.",

"Ability to troubleshoot, repair and maintain instruments and instrumentation systems.",

"Familiar with ISO standards and NABL Standards."

],

"#comment": ""

}

},

"#comment": ""

}

]

}

]

}

},

{

"@id": "services",

"@class": "services",

"div": {

"@class": "container",

"div": [

{

"@class": "section-title",

"h2": "Services",

"p": "We are here to grow from growing your business. Please feel free to contact us anytime. We will be glad to serve you !."

},

{

"@class": "row",

"div": [

{

"@class": "col-lg-4 col-md-6 icon-box",

"@data-aos": "fade-up",

"div": {

"@class": "icon",

"i": {

"@class": "bi bi-briefcase"

}

},

"h4": {

"@class": "title",

"a": {

"@href": "",

"#text": "WEB Development"

}

},

"#comment": ""

},

{

"@class": "col-lg-4 col-md-6 icon-box",

"@data-aos": "fade-up",

"@data-aos-delay": "100",

"div": {

"@class": "icon",

"i": {

"@class": "bi bi-card-checklist"

}

},

"h4": {

"@class": "title",

"a": {

"@href": "",

"#text": "Digital Marketing"

}

},

"#comment": ""

},

{

"@class": "col-lg-4 col-md-6 icon-box",

"@data-aos": "fade-up",

"@data-aos-delay": "200",

"div": {

"@class": "icon",

"i": {

"@class": "bi bi-bar-chart"

}

},

"h4": {

"@class": "title",

"a": {

"@href": "",

"#text": "Investing &Trading"

}

},

"#comment": ""

}

],

"#comment": ""

}

]

}

},

{

"@id": "contact",

"@class": "contact",

"div": {

"@class": "container",

"div": [

{

"@class": "section-title",

"h2": "Contact",

"p": ""

},

{

"@class": "row",

"@data-aos": "fade-in",

"div": [

{

"@class": "col-lg-5 d-flex align-items-stretch",

"div": {

"@class": "info",

"div": [

{

"@class": "address",

"i": {

"@class": "bi bi-geo-alt"

},

"h4": "Location:",

"p": "6/1974 F2 Athaikondan, Kovilpatti, TN"

},

{

"@class": "email",

"i": {

"@class": "bi bi-envelope"

},

"h4": "Email:",

"p": "k.anandarajj@gmail.com"

},

{

"@class": "phone",

"i": {

"@class": "bi bi-phone"

},

"h4": "Call:",

"p": "+91 8667728195"

}

],

"#comment": ""

}

},

{

"@class": "col-lg-7 mt-5 mt-lg-0 d-flex align-items-stretch",

"form": {

"@action": "forms/contact.php",

"@method": "post",

"@role": "form",

"@class": "php-email-form",

"div": [

{

"@class": "row",

"div": [

{

"@class": "form-group col-md-6",

"label": {

"@for": "name",

"#text": "Your Name"

},

"input": {

"@type": "text",

"@name": "name",

"@class": "form-control",

"@id": "name",

"@required": ""

}

},

{

"@class": "form-group col-md-6",

"label": {

"@for": "name",

"#text": "Your Email"

},

"input": {

"@type": "email",

"@class": "form-control",

"@name": "email",

"@id": "email",

"@required": ""

}

}

]

},

{

"@class": "form-group",

"label": {

"@for": "name",

"#text": "Subject"

},

"input": {

"@type": "text",

"@class": "form-control",

"@name": "subject",

"@id": "subject",

"@required": ""

}

},

{

"@class": "form-group",

"label": {

"@for": "name",

"#text": "Message"

},

"textarea": {

"@class": "form-control",

"@name": "message",

"@rows": "10",

"@required": ""

}

},

{

"@class": "my-3",

"div": [

{

"@class": "loading",

"#text": "Loading"

},

{

"@class": "error-message"

},

{

"@class": "sent-message",

"#text": "Your message has been sent. Thank you!"

}

]

},

{

"@class": "text-center",

"button": {

"@type": "submit",

"#text": "Send Message"

}

}

]

}

}

]

}

]

}

}

]

},

"footer": {

"@id": "footer",

"div": {

"@class": "container",

"div": [

{

"@class": "copyright",

"strong": {

"span": "Anandaraj K"

},

"#text": "© Copyright"

},

{

"@class": "credits",

"#comment": [

"",

"",

"",

""

],

"a": {

"@href": "#",

"#text": "TUT"

},

"#text": "Designed by"

}

]

}

},

"a": {

"@href": "#",

"@class": "back-to-top d-flex align-items-center justify-content-center",

"i": {

"@class": "bi bi-arrow-up-short"

}

},

"script": [

{

"@src": "assets/vendor/aos/aos.js"

},

{

"@src": "assets/vendor/bootstrap/js/bootstrap.bundle.min.js"

},

{

"@src": "assets/vendor/glightbox/js/glightbox.min.js"

},

{

"@src": "assets/vendor/isotope-layout/isotope.pkgd.min.js"

},

{

"@src": "assets/vendor/php-email-form/validate.js"

},

{

"@src": "assets/vendor/purecounter/purecounter.js"

},

{

"@src": "assets/vendor/swiper/swiper-bundle.min.js"

},

{

"@src": "assets/vendor/typed.js/typed.min.js"

},

{

"@src": "assets/vendor/waypoints/noframework.waypoints.js"

},

{

"@src": "assets/js/main.js"

}

]

}

}

}

**3.Read about the difference between window, screen and document in javascript:**

**Window:**

The window object is supported by all browsers. It represents the browser's window. All global JavaScript objects, functions, and variables automatically become members of the window object. Global variables are properties of the window object. Global functions are methods of the window object. Even the document object (of the HTML DOM) is a property of the window object:

window.document.getElementById("header");

is the same as:

document.getElementById("header");

**Screen:**

The window.screen object contains information about the user's screen. The window.screen object can be written without the window prefix.

Properties:

* screen.width
* screen.height
* screen.availWidth
* screen.availHeight
* screen.colorDepth
* screen.pixelDepth

Window Screen Width

* The screen.width property returns the width of the visitor's screen in pixels.

### Example: Display the width of the screen in pixels:

document.getElementById("demo").innerHTML =  
"Screen Width: " + screen.width;

**Output:** Screen Width: 1536

**Document:**

The document object represents your web page. If you want to access any element in an HTML page, you always start with accessing the document object. Below are some examples of how you can use the document object to access and manipulate HTML.

Finding HTML Elements

|  |  |
| --- | --- |
| **Method** | **Description** |
| document.getElementById(*id*) | Find an element by element id |
| document.getElementsByTagName(*name*) | Find elements by tag name |
| document.getElementsByClassName(*name*) | Find elements by class name |