

Question 1: Answer The Following Questions

- 1- What is Object Destructuring?
- 2- Explain Closures in JavaScript.
- 3- What do you understand by hoisting in JavaScript?
- 4- Explain the @Component Decorator In Angular .
- 5- What is Eager and Lazy loading?
- 6- How to use ngFor in a tag?
- 7- How do you specify units in the CSS?. What are the different ways to do it?
- 8- What property is used for changing the font face?
- 9- How is border-box different from content-box?
- 10- How to center align a div inside another div? [2 Ways]

Question2 : What is The Output ?

```
const SumBy = num1 => num2 => num1 + num2;  
const sumByTwo = SumBy(2);  
const sumByThree = SumBy(3);  
  
console.log(sumByTwo(4));  
console.log(sumByThree(5));
```

```
class Chameleon {
  static colorChange(newColor) {
    this.newColor = newColor;
    return this.newColor;
  }

  constructor(newColor) {
    this.newColor = newColor;
  }
}

const freddie = new Chameleon('Purple');
console.log(freddie.colorChange('orange'));
```

```
function Person(firstName, lastName) {
  this.firstName = firstName;
  this.lastName = lastName;
}

const member = new Person('Lydia', 'Hallie');
Person.getFullName = function() {
  return `${this.firstName} ${this.lastName}`;
};

console.log(member.getFullName());
```

```
var p = new Promise((resolve, reject) => {  
  reject(Error('The Fails!'))  
})  
p.catch(error => console.log(error))  
p.catch(error => console.log(error.message))  
p.catch(error => console.log(error.message))
```

```
const add = (() => {  
  let state = 0;  
  return (v) => {  
    return (state += v);  
  };  
})();
```

```
class Calculator {  
  constructor(addFn) {  
    this.addFn = addFn;  
  }  
  
  add(v1, v2) {  
    return this.addFn(v1), this.addFn(v2);  
  }  
}  
  
const c1 = new Calculator(add);  
const c2 = new Calculator(add);  
console.log(c1.add(1, 1));  
console.log(c2.add(1, 1));
```

Question 3 :

1- Consider the following code snippet

```
for (var i = 0; i < 5; i++) {  
  var btn = document.createElement('button');  
  btn.appendChild(document.createTextNode('Button ' + i));  
  btn.addEventListener('click', function(){ console.log(i); });  
  document.body.appendChild(btn);  
}
```

(a) What gets logged to the console when the user clicks on “Button 4” and why?

(b) Provide one or more alternate implementations that will work as expected.

2- Given an integer x, return true if x is palindrome integer.

An integer is a palindrome when it reads the same backward as forward.

For example, 121 is a palindrome while 123 is not.

3- Write a JavaScript program to remove items from a dropdown list.

4- Write a JavaScript program to calculate the volume of a sphere.

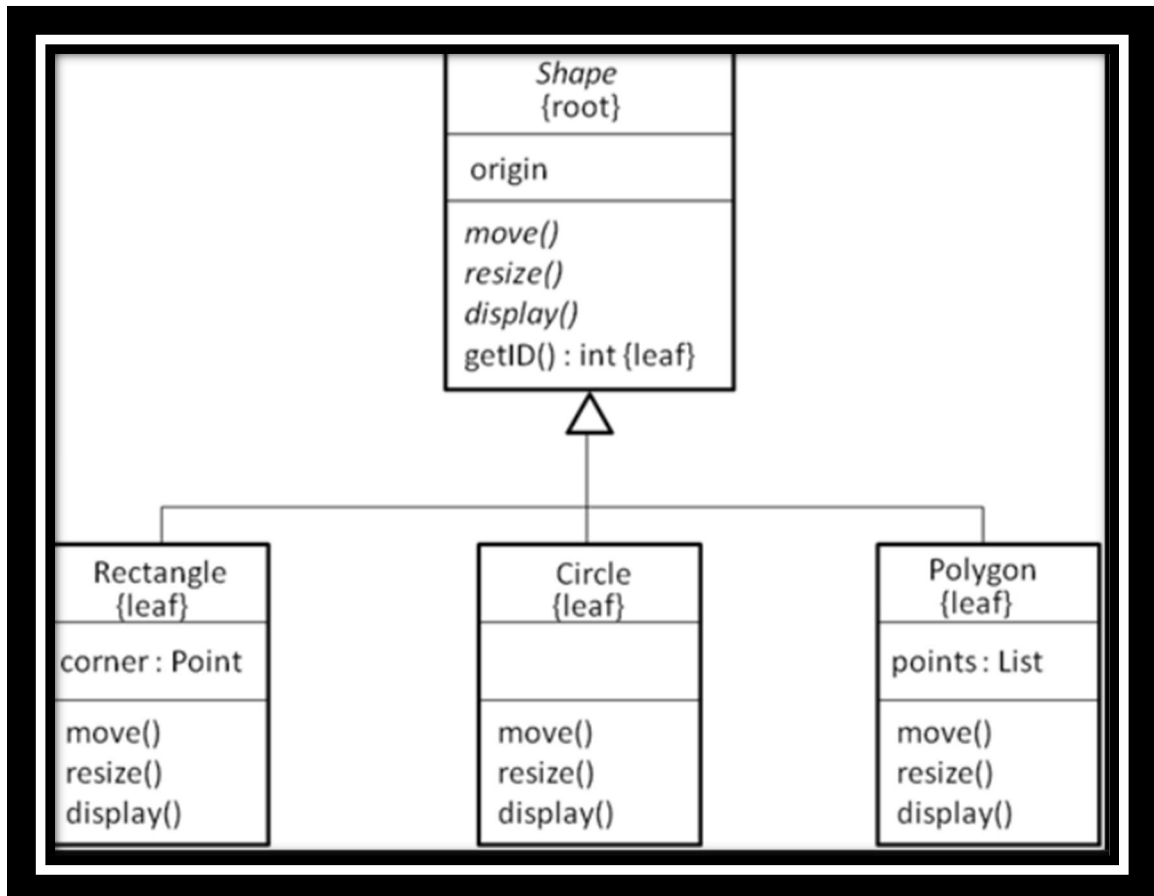
Input radius value and get the volume of a sphere.

Radius

Volume

Calculate

- 5- Write a function that returns the length of a string. Make your function recursive.
- 6- Create sticky footer using html , css and javascript
- 7- Make This Possible



- 8- Add Validation To This Form Using Reactive Form Module In Angular.
Email Address Make it Required
Message Make it Required Min-length = 50 And Max Length 240

Email address

Example textarea

Send

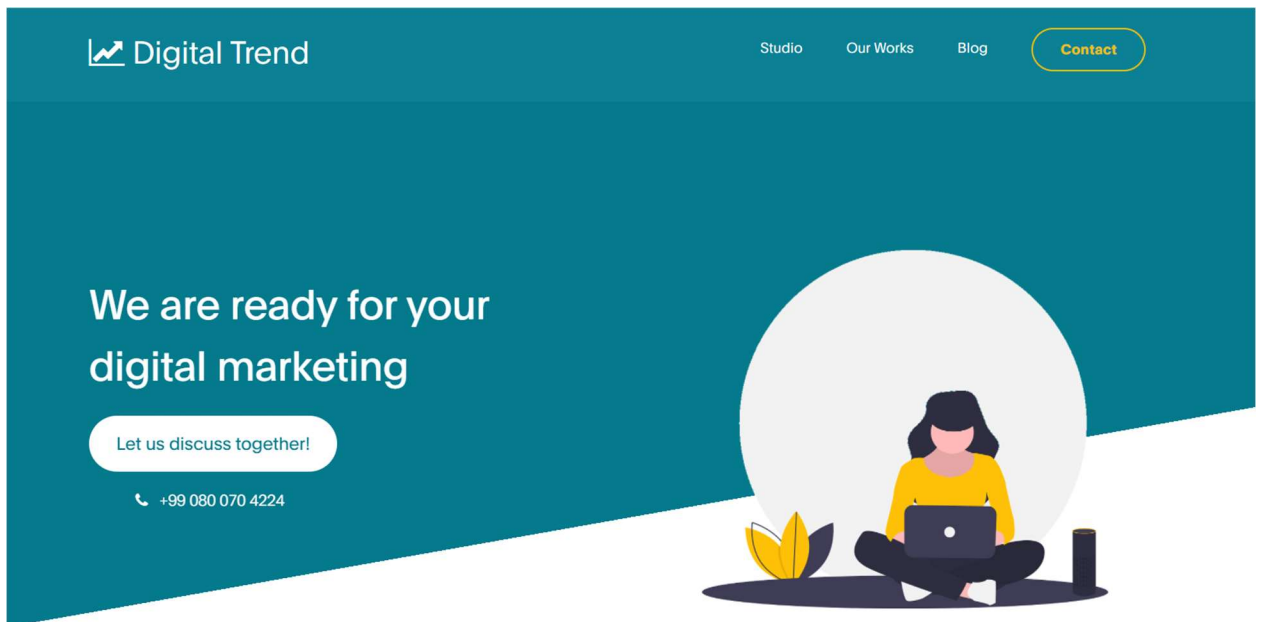
9- From This Api Link Fetch Data And Show id , title and body

<https://jsonplaceholder.typicode.com/posts>

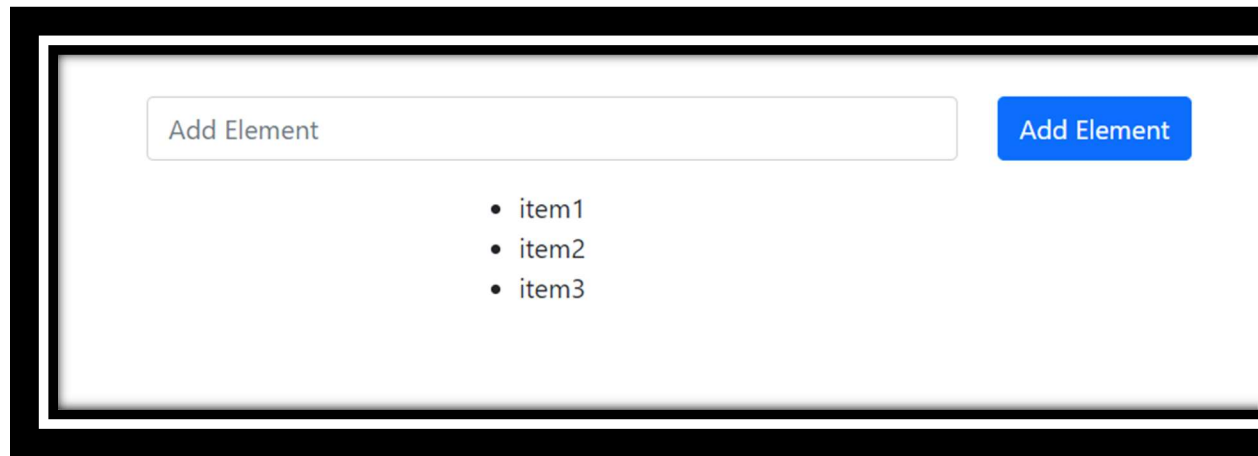
a) Use fetch function and display data into card

b) Using Angular Framework Display Data into Table

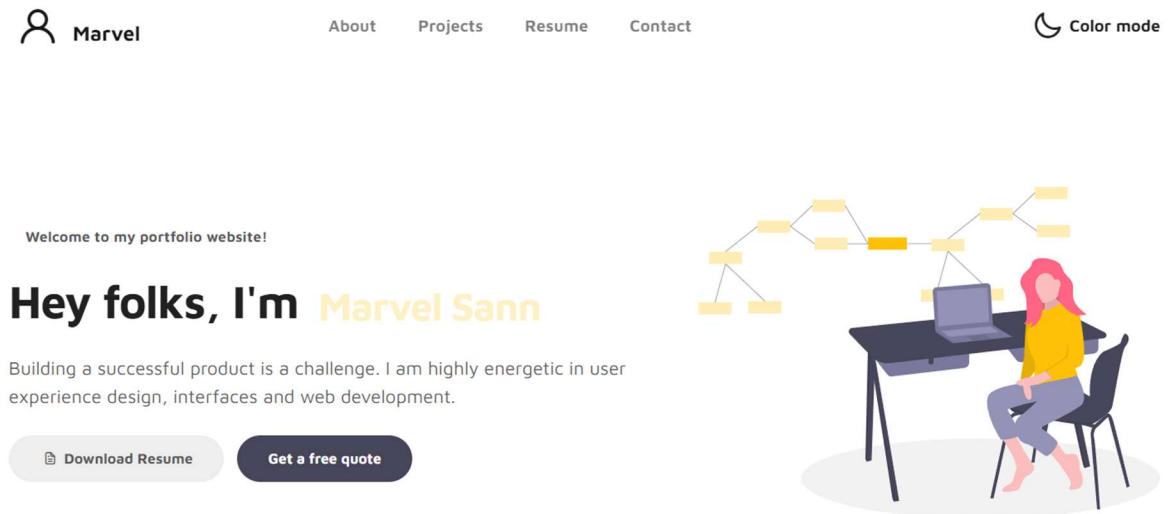
10- Using Html5 and Css3 Make This Image Possible



11- Using JQuery Add And Remove Todo Element



12- Using Sass Make This Possible



Question4 : True Or False

- 1- JavaScript is synchronous, blocking, single-threaded language. **False**
- 2- With interpolation, Angular Converts the expression results to strings.
- 3- Javascript provides a parameterless constructor for each class. **False**
- 4- A method inside an abstract class must be declared abstract **False**

- 5- Two formal parameters for the same method may use the same name in Javascript **False**
- 6- A class may extend only one other class and implement only one interface **False**
- 7- If class A extends class B, class A is a subclass of B and B is a superclass of A. **True**
- 8- Encapsulation is the concept of object-oriented programming that “shows” only essential attributes and “hides” unnecessary information. **False => Abstraction**
- 9- Elements that have higher z-index values are displayed in front of elements with lower z-index values. **True**
- 10- Enums or enumerations are a TypeScript data type that allows us to define a set of named constants

GoodLuck 😊

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