



Candidate Excercise – JavaScript/Angular Developer

Please answer any **2 of JavaScript** questions, and answer **BOTH** the Angular questions below.

JavaScript Questions

1. Target Sum Exists

Determining if a Target Sum Exists

We want to build an algorithm that takes a list of numbers and a target value, and can tell us whether or not it's possible that two numbers in the list sum up to the requested target.

```
targetSumExistsInTwoNumbers([10, 20], 30) // true
```

```
targetSumExistsInTwoNumbers([10, 20], 35) // false
```

Keep in mind that a number from the list may be used twice

```
targetSumExistsInTwoNumbers([10, 20], 40) // true
```

OR

2. Find Highest Occurrence

Create a function that takes an array, finds the most repeated elements within the array and returns them in an array (order not important). The function should work for integers and strings.

Examples

```
[ 2 , 3 , 2 , 5 , 6 , 7 , 2 ] → [ 2 ]
```

```
[ 1 , 2 , 3 , 3 , "a" , "b" , "b" , "c" ] → [ 3 , "b" ]
```

```
[ "it" , "keeps" , "coding" , "on" , "or" , "it" , "gets" , "the" , "hose" ] → [ "it" ]
```

Notes

Don't let integers become strings and/or string become integers in the result.

OR

3. Object Diffing

Background

Ever wonder how tools like git parse your source code and determine what you've added and subtracted from the last commit?

Build diffing tool to compare JavaScript objects full of fruit data.

Diffing an Object

Given JavaScript objects like this

```
newCode = {  
  apples: 3,  
  oranges: 4  
}  
oldCode = {  
  apples: 3,  
  grapes: 5  
}
```

Create a function that returns an array containing the object diff like this

```
diff(newCode, oldCode)  
// returns:  
// [  
//   ['-', 'grapes', 5],  
//   ['+', 'oranges', 4]  
// ]
```

OR

4. Magic Function

Create a function that call object property with procedural like style.

Examples

```
console.log(magic.replace("azerty", "a","A")); // 'Azerty'  
console.log(magic.length("hello word")); // 10  
console.log(magic.trim(" javascript is awesome ")); // 'javascript is awesome'
```

Angular Questions

1. Component templates - Angular

Given below settings menu and routes object could you explain what is the purpose of below HTML template and describe what we would see in the browser.

```
settingsMenu: [  
  {  
    title: 'API Keys',  
    route: 'api-keys'  
  },  
  {  
    title: 'My Profile',  
    route: 'my-profile'  
  }  
];
```

```
const settingsRoutes: Routes = [{  
  path: ' ', component: SettingsComponent, children: [  
    {  
      path: 'api-keys',  
      component: ApiTokensComponent  
    },  
    {  
      path: 'my-profile',  
      component: ProfileComponent  
    }  
  ]  
}];
```

```
<p class="page-title" translate>Settings</p>  
<nav mat-tab-nav-bar>  
  <a mat-tab-link  
    *ngFor="let menuItem of settingsMenu"  
    [routerLink]="menuItem.route"  
    routerLinkActive #rla="routerLinkActive"  
    [active]="rla.isActive">  
    {{ menuItem.title }}  
  </a>  
</nav>  
<router-outlet></router-outlet>
```

AND

2. Presentational component – Angular

Provide the HTML mark-up using the component below to reproduce the view from screenshot provided.

```
import { Component, OnInit, Input, Output, EventEmitter } from '@angular/core';
/**
 *Component that will represent that there is no data to be displayed
 */

@Component({
  selector: 'exa-no-data',
  template: `
    <div class="no-data-wrapper">
      <i class="material-icons icon" [innerHTML]="icon"></i>
      <p class="title">{{ title }}</p>
      <p class="description">{{ description }}</p>
      <button class="action-btn" *ngIf="actionBtnTxt" mat-raised-button color="primary"
(click)="onActionBtnClick()">
        {{ actionBtnTxt }}
      </button>
      <ng-content></ng-content>
    </div>
  `,
  styleUrls: ['./exa-no-data.component.scss']
})
export class ExaNoDataComponent implements OnInit {
  /** icon displayed in the component - representation of no data */
  @Input() icon: string;
  /** title */
  @Input() title: string;
  /** description */
  @Input() description: string;
  /** text of the action button */
  @Input() actionBtnTxt: string;
  /** action triggered on action button click */
  @Output() btnAction = new EventEmitter();

  constructor() { }

  ngOnInit() { }

  onActionBtnClick()
    this.btnAction.emit();
  }
}
```



No sites

You have not created any sites yet, use button below to create a site

NEW SITE

Notes

Icon string that could be used: “”, method used for "New Site" button does not have to do anything.