



Date: 2nd March 2022

Time: 5 hours

Focus: NodeJS

Question 1:

You have an array containing the following values [10, 20, 60, 30, 54, 39]. Write a function to get the sum of all elements of an array.

Note:- This function should manage different possibilities.

Example:

```
var list = [10, 20, 60, 30, 54, 39]
var result = solution(list)
```

Here, the result should contain 213.

Question 2:

Write a function:

```
function solution(A);
```

that, given an array A of N integers, returns the smallest positive integer (greater than 0) that does not occur in A.

For example, given A = [1, 3, 6, 4, 1, 2], the function should return 5.

Given A = [1, 2, 3], the function should return 4.

Given A = [-1, -3], the function should return 1.

Question 3:

Write a function:

function solution(A);

That will extract even and odd numbers from an array A.

For example, given A = [1, 3, 4, 6, 8, 9], the function should return two arrays, index 0 should contain array of odd numbers and index 1 should return array of even number

Note: if there are no even or odd numbers, the function should return an empty array.

Question 4:

symptoms.json

```
{
  "lowMood": "Low mood",
  "sleepOrAppetiteChanges": "Sleep or appetite changes",
  "withdrawal": "Withdrawal",
  "dropInFunctioning": "Drop in functioning",
  "increasedSensitivity": "Increased sensitivity",
  "apathy": "Apathy",
  "feelingDisconnected": "Feeling disconnected",
  "illogicalThinking": "Illogical thinking",
  "nervousness": "Nervousness"
}
```

goals.json

```
{
  "hydrate": {
    "title": "Hydrate",
    "description": "",
    "symptoms": [
      "lowMood",
      "apathy"
    ]
  },
  "eatBreakfast": {
    "title": "Eat breakfast",
    "description": "",
    "symptoms": [
      "lowMood"
    ]
  },
  "yoga": {
    "title": "Yoga",
    "symptoms": [
      "lowMood"
    ]
  },
  "petADog": {
    "title": "Pet a dog",
    "description": "",
    "symptoms": [
      "feelingDisconnected",
      "lowMood",
      "increasedSensitivity"
    ]
  }
}
```

```

    ],
    "PerformARandomActOfKindness" : {
      "title": "Perform a random act of kindness",
      "description": "",
      "symptoms": [
        "feelingDisconnected",
        "lowMood"
      ]
    },
    "exercercise" : {
      "title": "Excercise",
      "description": "",
      "symptoms": [
        "lowMood"
      ]
    },
    "deepBreathingExercises" : {
      "title": "Deep breathing exercises",
      "description": "",
      "symptoms": [
        "illogicalThinking",
        "nervousness"
      ]
    },
    "meditate": {
      "title": "Meditate",
      "description": "",
      "symptoms": [
        "lowMood",
        "dropInFunctioning",
        "illogicalThinking"
      ]
    },
    "socialActivity": {
      "title": "Social Activity",
      "description": "",
      "symptoms": [
        "feelingDisconnected",
        "withdrawal"
      ]
    },
    "noScreensAtBedTime": {
      "title": "No screens at bed time",
      "description": "",
      "symptoms": [
        "sleepOrAppetiteChanges"
      ]
    },
    "melatonin": {
      "title": "Melatonin",
      "description": "",
      "symptoms": [
        "sleepOrAppetiteChanges"
      ]
    }
  }
}

```

From the above two files, we need to get the symptom name from the symptoms.json for each goal.

Write a function to get the value of symptom for each goal in goals.json from symptoms.json

For example: solution("yoga") should return

```
{  
  "title": "Yoga",  
  "symptoms": [  
    "Low mood"  
  ]  
}
```