WAF-2 ASSIGNMENT

SHIVAM KUMAR BAHGAT PES1PG23CA130

```
1.
    function calculateTotal(cart) {
    return cart.reduce((total, item) => total + item.price, 0);
}

const cart = [{ price: 100 }, { price: 200 }, { price: 300 }];

console.log(calculateTotal(cart));
```

```
[Running] node
"c:\Users\shiva\OneDrive\Desktop\CLASS\script_class.js"
600
```

```
function mergeUserInfo(userInfo, preferences) {
  return { ...userInfo, ...preferences };
}

const userInfo = { name: "John", age: 30 };

const preferences = { theme: "dark", language: "en" };

console.log(mergeUserInfo(userInfo, preferences));
```

```
[Running] node
"c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
{ name: 'John', age: 30, theme: 'dark', language: 'en' }
```

```
3.
   function getFirstName(fullName) {
     return fullName.split(" ")[0];
    }
    const fullName = "John Doe";
   console.log(getFirstName(fullName));
    [Running] node
    c:\Users\shiva\OneDrive\Desktop\CLASS\script_class.js"
   John
4.
   function extractTitles(books) {
    return books.map(book => book.title);
   }
   const books = [{ title: "Book 1" }, { title: "Book 2" }];
   console.log(extractTitles(books));
    Running| node
    c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
     'Book 1', 'Book 2']
5.
   function simulateDelay(ms) {
     return new Promise(resolve => setTimeout(resolve, ms));
    }
    simulateDelay(2000).then(() => console.log("Delayed for 2 seconds"));
    [Running] node
    c:\Users\shiva\OneDrive\Desktop\CLASS\script_class.js"
   Delayed for 2 seconds
6.
```

function convertValuesToUpperCase(obj) {

```
for (let key in obj) {
  if (typeof obj[key] === 'string') {
   obj[key] = obj[key].toUpperCase();
 }
 }
 return obj;
}
const obj = { name: "john", city: "new york" };
console.log(convertValuesToUpperCase(obj));
[Running] node
"c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
{ name: 'JOHN', city: 'NEW YORK' }
  7.
       function wordLengths(words) {
        return words.map(word => word.length);
       }
       const words = ["apple", "banana", "cherry"];
       console.log(wordLengths(words));
        [Running] node
        c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
        5, 6, 6]
  8.
       function findCommonInterests(user1, user2) {
        return user1.filter(interest => user2.includes(interest));
       }
       const user1Interests = ["coding", "music", "gaming"];
       const user2Interests = ["sports", "music", "coding"];
```

console.log(findCommonInterests(user1Interests, user2Interests));

```
[Running] node
"c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
[ 'coding', 'music' ]
```

```
function removeFieldFromFormData(formData, field) {
   const { [field]: _, ...rest } = formData;
   return rest;
}

const formData = { name: "John", age: 30, email: "john@example.com" };
   console.log(removeFieldFromFormData(formData, "email"));

[Running] node
   "c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
   { name: 'John', age: 30 }
```

function countCharacterOccurrences(str) {
 const count = {};
 for (let char of str) {
 count[char] = (count[char] | | 0) + 1;
 }
 return count;
}

const text = "hello world";
 console.log(countCharacterOccurrences(text));

10.

```
[Running] node
"c:\Users\shiva\OneDrive\Desktop\CLASS\tempCodeRunnerFile.js"
{ h: 1, e: 1, l: 3, o: 2, ' ': 1, w: 1, r: 1, d: 1 }
```