

4 July 2024

Pen paper work

- (i). Create a user-defined callback function that sorts an array of number in ascending or descending order based on the callback provided. The master function should take an array and a callback function as arguments?

=> ~~function sortCallback(arr, compareFn) {
if (type of compareFn !== 'function') {~~

function ascendingSort(arr)

{

for (let i = 0; i < arr.length; i++)

{

for (let j = 0; j < arr.length - 1 - i; j++)

{

if (arr[j] > arr[j+1])

{

t = arr[j];

arr[j] = arr[j+1];

arr[j+1] = t;

}

}

}

return arr;

}


```
function descendingSort (arr)
```

```
{
```

```
  for (let i = 0; i < arr.length; i++)
```

```
  {
```

```
    for (let j = 0; j < arr.length - 1 - i; j++)
```

```
    {
```

```
      if (arr[j] < arr[j+1])
```

```
      {
```

```
        let t = arr[j];
```

```
        arr[j] = arr[j+1];
```

```
        arr[j+1] = t;
```

```
      }
```

```
    }
```

```
  }
```

```
  return arr;
```

```
}
```

```
const solution = (arr2, callbackFunction) => {
```

```
  return callbackFunction(arr2);
```

```
}
```

```
let arr = [4, 5, 6, 7, 1, 5];
```

```
console.log(solution(arr, ascendingSort));
```

```
console.log(solution(arr, descendingSort));
```


- ②. Create an object named product with at least 5 keys (eg... productId, productName, price, category, tags). One of the key should have an array as its value. Then, create a function that accepts this object in destructured format, prints all the information, and calls another function that will pass the key array into another function. Additionally call a function that will pass the object as a key into another function and print all the keys.

```
const product = {
  productId: 1,
  productName: "Bat",
  price: 1000,
  category: "Cricket",
  tags: ["Bat", "Ball", "wickets"]
}
```

```
}
```

```
function show(tags)
```

```
{
```

```
  console.log(tags);
```

```
}
```

```
function list({ productId, productName, price, category, tags })
```

```
{
```

```
  console.log(productId);
```

```
  console.log(productName);
```

```
  console.log(price);
```

```
  console.log(category);
```

```
  console.log(tags);
```

```
  show(tags);
```

```
}
```


function print(product) {

{

console.log(product.productId);

console.log(product.productName);

console.log(product.price);

console.log(product.category);

console.log(product.tags);

}

list(product);

print(product);

(3)

```
=> const student = {  
  studentId : 135,  
  studentName : "Kailash",  
  grade : "A";  
  subjects : "English";  
  hobbies : ["Reading", "writing", "travelling"]  
}
```

```
function show(hobbies)  
{  
  console.log(hobbies);  
}
```

```
function studentIdentity(studentId, studentName, grade, subjects,  
hobbies) {
```

```
{  
  console.log(studentId);  
  console.log(studentName);  
  console.log(grade);  
  console.log(subjects);  
  console.log(hobbies);
```

```
  show(hobbies);
```

```
}
```

```
studentIdentity(student);  
print(student);
```


Q4

=>

```
const customer = {  
  cust customerId: 3,  
  customerName: "Raj",  
  email: "raj@gmail.com",  
  phoneNumber: "9998742616",  
  address: ["Goa", "Rajasthan"]  
}
```

function show(addresses)

{

console.log(addresses);

}

function customerInfo(customerId, customerName, email, phoneNumbers, addresses)

{

console.log(customerId);

console.log(customerName);

console.log(email);

console.log(phoneNumbers);

console.log(addresses);

show(addresses);

}

function print(customer)

{

console.log(customer.customerId);

console.log(customer.customerName);

console.log(customer.email);

console.log(customer.phoneNumbers);

console.log(customer.addresses);


```
CustomerInfo (customer);  
print(customer);
```

Q5 =>

```
const project = {  
  ProjectId: 4567,  
  ProjectName: "MongoDB",  
  deadline: "26-04-2024",  
  teammembers: ["Ashit", "Mohan", "John"],  
  tasks: "data addition".  
};
```

```
function show(teammembers)
```

```
{  
  console.log(teammembers);  
}
```

```
function projectdetails (projectId, projectName, deadline, teammembers,  
tasks).
```

```
{  
  console.log(projectId);  
  console.log(projectName);  
  console.log(deadline);  
  console.log(teammembers);  
  console.log(tasks);  
}
```

```
show(teammembers);  
}
```

```
function print(project)
```

```
{  
  console.log(project.projectId);  
  console.log(project.projectName);  
  console.log(project.deadline);  
  console.log(project.teammembers);  
  console.log(project.tasks);  
}
```



```
ProjectDetail(project);  
print(project);
```

Q.1

⇒

```
function addToArray(array, new newElement)
```

```
{
```

```
  return [...array, newElement];
```

```
}
```

```
const initialArray = [1, 2, 3];
```

```
const newArray1 = addToArray(initialArray, 4);
```

```
const newArray2 = addToArray(newArray1, 5);
```

```
console.log(initialArray);
```

```
console.log(newArray1);
```

```
console.log(newArray2);
```


Q 97

```
=> function removeLastElement(array)
{
  return array.slice(0, -1);
}
```

```
const initialArray = [1, 2, 3, 4];
const newArray1 = removeLastElement(initialArray);
const newArray2 = removeLastElement(newArray1);
```

```
console.log(initialArray);
console.log(newArray1);
console.log(newArray2);
```

```
(function() {
  console.log('1');
  console.log('2');
  console.log('3');
})()
```