

Arrays Programs

METRO

HOLLOW CRAFT STICKER

Centre No.
केंद्र क्रमांक

Seat No.
बैठक क्रमांक
(in Figure)
(आकार)

(in Words)
(अक्षरात)

Candidate's
Signature
परीक्षार्थीची संहा

Supervisor's
Signature
पर्यावरणाची संहा

Hollow Craft Sticker

शाळेचा शिक्का

CSS Unit II

बारकोड ह्या चौकटीत चिकटवा.

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Hollow Craft Sticker

बारकोड संबंधी सूचना

- 1) विद्यार्थ्यांनी प्रथम पर्यावरणाकडून बारकोड स्टिकर घ्यावे.
- 2) बारकोड वरील बैठक क्रमांक व विषय वरोवर असल्याची खात्री करून घ्यावी.
- 3) बारकोड स्टिकर त्यासाठी दिलेल्या जागेमध्ये घडी पढून देता चिकटवावा.
- 4) बारकोडवर अन्य कोणतेही लिखाण करू नये. केव्यास परीक्षेतील गैरभागाचा प्रकार मानव्यात घेईल.
- 5) उत्तर पत्रिकेच्या सुखपृष्ठवरील अन्य माहिती, विहित जागेत लिहावी.

SSC HSC

फक्त UID कोडसाठी जागा
(परीक्षक वापरासाठी)

SSC HSC

Subject/ विषय :			
Page/ पृष्ठ :			
Date/ दिनांक :			
Language of Answer/ उत्तर लेण्डनाऱ्याची भाषा :			

Supplements attached

Main Answer Book	No. of supplements	Total in Figure
1	+	=

Specific remarks of centre conductor regarding malpractices (in Red Ink)

उपरागातून घडलेल्या सांसार्गिकांवरील केन्द्र संचालकांना अनियन्त्रित (मानव गार्डमध्ये)

Q. No.	Examiner	Moderator	Chief Moderator
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Total in Words			
Signature			
Appl. No.			

Summer 2024

Q.No.

Q.No.

Q. Write a Javascript program to display the elements of array in ascending and descending order.

⇒ <HTML>

<HEAD>

<TITLE> Sorting </TITLE>

</HEAD>

<BODY>

<Script type="text/javascript">
var arr = [45, 12, 32, 78]

document.write("Before array = " + arr);

document.write("
Sorted array = " + arr.sort());

document.write("
Reversed Array = " + arr.reverse());

</script>

</Body>

</HTML>

Output

Before Array = 45, 12, 32, 78

Sorted Array = 12, 32, 45, 78

Reversed Array = 78, 45, 32, 12

2.2.11.2.5.1 sorting - hand written notes

✓

2022
Winter 2022

Q.No.

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Q.No.

Q3 Write a Javascript program that will remove the duplicate element from an array.

→ <HTML> <HEAD> <TITLE> </TITLE> </HEAD> <BODY>

<TITLE> Duplicate remove </TITLE>

</HEAD> <BODY> <SCRIPT>

<Body>

<script type="text/javascript">

var a = [1, 2, 3, 4, 5, 5, 6, 6];

var b = [new Set(a)];

//Set is use to remove duplicate

document.write("Original Array " + a);

document.write("Without Duplicate " + b);

</script>

</Body>

</HTML>

Output

Output

Original Array 1, 2, 3, 2, 4, 5, 5, 6, 6

Array without Duplicate 1, 2, 3, 4, 5, 6

Q.No.

Q.No.

Date

Q3

Write a Javascript that initializes array called flowers with names of 3 flowers. The script displays array elements.

⇒ <HTML>

<HEAD>

<TITLE> Array Elements </TITLE>

</HEAD> <BODY>

<Body>

<script type="text/javascript">

</script> <var flowers = new Array () ;

flowers[0] = "Rose";

flowers[1] = "Lotus";

flowers[2] = "Lily";

for (var i=0; i<flowers.length; i++)

{ flowers[i].innerHTML = flowers[i]; }

document.write (flowers[i] + "
");

</script>

</body> </HTML>

Output

Rose

Lotus

Lily

Bar

Milk

Azra

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Q.No.

Q1

Write a JavaScript that initializes an array called colours with the names of 3 colours and display the array elements.



<HTML>

<HEAD>

<TITLE> Colours </TITLE>

<HEAD>

<Body>

<script type="text/javascript">

var colours = ["Red", "Yellow", "Green"]

document.write([colours])

for (var i = 0; i < colours.length; i++)

document.write("
" + colours[i])

</script>

</Body></HTML>

Output

Red

Yellow

Green

Red
Yellow
Green

Red

Yellow

Green

Q.No.

Q.No.

Q5

write a JavaScript code to display 5 elements in array in sorted order.

→ <HTML>

<HEAD>

<TITLE> Array </TITLE>

</HEAD>

<BODY>

<script type="text/javascript">

var array = ["Red", "red", "Blue", "green"];

document.write ("Before sorting : ");

for (var i=0; i<array.length; i++)

{

document.write (
 ^{array} + array[i]);

document.write (
 After sorting :);

array.sort();

document.write (
 array[i]);

for (var i=0; i<array.length; i++)

document.write (
 array[i]);

}

</script> </Body> </HTML>

Output

Before sorting

Red red Blue Green

After sorting

Blue Green Red red

Q.No.

Q.No.

Q.No.

~~(Q6)~~

Write a JavaScript function to merge two arrays & removes all duplicate values.

→ `<HTML>`

`<HEAD>`

`<title>Hello</title>`

`<HEAD>`

`<Body>`

`<script type="text/javascript">`
function mergeDuplicate(arr1, arr2)

`{`

`return [...new Set(arr1.concat(arr2))]`

`}`

`const array1 = [1, 2, 3, 4, 5];`

`const array2 = [4, 5, 6, 7, 8];`

`const result = mergeDuplicate(array1, array2);`

`document.write("merge and unique array," + result.join());`

`<script>`

`</body>`

`<HTML>`

Q.No.

Q.No.

~~Q8~~ write a Javascript program that will display list of student in ascending order according to the marks & calculate the average performance of class.

Student Name	Marks
Amit	70
Sumit	78
Abhishek	71

```

⇒ <script type="text/javascript">
var students = [
    {name: "Amit", marks: 70},
    {name: "Sumit", marks: 78},
    {name: "Abhishek", marks: 71}
];
students.sort(function(a,b){
    return a.marks - b.marks
});
document.write("Students sorted by marks");
for(var i=0; i<students.length; i++)
{
    document.write("Name : " + students[i].name);
    document.write("Marks : " + students[i].marks);
}

```

4

Q.No.

var totalmarks = 0;
for (var i = 0; i < students.length; i++)
{
 totalmarks += students[i].marks;
}

var average = totalmarks / students.length;

document.write("Average marks:" + average);

</script>

Output
Students sorted by marks

Name: Amit

Marks: 70

Name: Abhishek

Marks: 71

Name: Sumit

Marks: 78

Average marks: 73

Do not write your name or seat no. below this line

Q.No.

Q.No.

Q.No.
Q.No.

Q8
write a Javascript program which computes the average marks of following students then the average is used to determine the corresponding grade.

<u>Student Name</u>	<u>Marks</u>
Sumit	80
Kalpesh	77
Amit	88
Tejas	93
Abhishek	65

The grades

Range	Grade
< 60	E
< 70	D
< 80	C
< 90	B
< 100	A

<script type="text/javascript">
var students =

```
[ {name: "Sumit", marks: 80},  
 {name: "Kalpesh", marks: 77},  
 {name: "Amit", marks: 88},  
 {name: "Tejas", marks: 93},  
 {name: "Abhishek", marks: 65} ];
```

```
var totalmarks = 0;
for(var i=0; i<students.length; i++) {
    totalmarks += students[i].marks;
}
var average = totalmarks/students.length;

var grade;
if(average < 60) {
    document.write("E" + "grade = " + "E");
} else if(average < 70) {
    grade = "D";
} else if(average < 80) {
    grade = "C";
} else if(average < 90) {
    grade = "B";
} else if(average < 100) {
    grade = "A";
}
document.write("Average : " + average);
document.write("Grade : " + grade);

</script>
```

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String Programs + Theory

METRO

HOLLOW CRAFT STICKER

Centre No.:

केंद्र नंबर

Seat No.

बारकोड इमेज
(In Figure)
(कैसल)

(In Words)
(अङ्ग्रेजी)

Candidate's
Signature

परीक्षकाची सही

Supervisor's
Signature

परीक्षकाची सही

Hollow Craft Sticker

बारकोड ह्या चौकटीत चिकटवा.

Paste the Barcode Sticker here

Hollow Craft Sticker

शाळेचा शिक्का

CS5 Unit II

बारकोड संबंधी सूचना

- 1) विद्यार्थ्यांनी प्रथम पर्यवेक्षकाकडून बारकोड स्टिकर घ्यावे.
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- 4) बारकोडवर अन्य कोणतेही लिखाण करू नये. केल्यास परीक्षेतील गैरमार्गाचा प्रकार मानल्यात येईल.
- 5) उत्तर पत्रिकेच्या मुख्यपृष्ठवरील अन्य माहिती, विहित जागेत लिहावी.

SSC HSC

फक्त UID कोडसाठी जागा
(परीक्षक वापरासाठी)

SSC HSC

| | | |
|---|--|--|
| Subject /
विषय : | | |
| Paper
पेपर : | | |
| Date
दिनांक : | | |
| Language of Answer
उत्तर संस्कृताची भाषा : | | |

Supplements attached

| Main
Answer Book | No. of supplements | Total in
Figure |
|---------------------|--------------------|--------------------|
| 1 | + | = |

Specific remarks of centre conductor regarding malpractices (in Red Ink)

उत्तरातील बारकोड चौकटीत असेला आणला असेही केंद्र
मानल्याचे अभिशाय (सात ग्रांटमध्ये)

| | Marks in
Figure | Marks in Words | Signature | Appl.
No. |
|--------------------|--------------------|----------------|-----------|--------------|
| Examiner | | | | |
| Moderator | | | | |
| Chief
Moderator | | | | |
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| Q. No. | Examiner | Moderator | Chief
Moderator |
|--------------------|---------------------------|-----------|--------------------|
| 1 | <u>Difference</u> | | |
| 2 | <u>concat() vs join()</u> | | |
| 3 | | | |
| 4 | <u>push() vs join()</u> | | |
| 5 | | | |
| 6 | <u>shift() vs push()</u> | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
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| Total in
Figure | | | |
| Total in
Words | | | |
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Q.No.

Q.No.

Q.1

Write Javascript function that checks whether a passed string is palindrome or not. also Program → 6 m

⇒ <script>

function isPalindrome(str)

{

const clearStr = str.toLowerCase().replace(/[^\w\s]/g, ''));

const reverse = clearStr.split(' ').reverse().join('');

return clearStr == reverse;

};

var inputStr = prompt("enter string");

if(isPalindrome(inputStr))

{

 alert(inputStr + "is palindrome");

}

else

{

 alert(inputStr + "is not palindrome");

}

</script>

Q.No.

Q.No.

Q2

Write Javascript function to check the first character of string is upper case or not.



Script > function isUppercase(str)

```
if(str.length == 0)
{
    return false;
}
else
```

return str.charAt(0).toUpperCase() == str.charAt(0);

y

i("Prints string to console")

```
if(isUppercase(prompt("Enter text")))
{
    document.write("First letter is Uc");
}
```

```
else
{
    document.write("First letter is not Uc");
}
```

y

else

{

```
document.write("First letter is not Uc");
}
```

</script>

Q3

Write an JavaScript code to print the following operations on strings (use split() method)

Input string: "Sudha Narayana Murthy"
Display output as:
First Name : Sudha
Middle Name : Narayana
Last Name : Murthy

⇒ <script>
var str = "Sudha Narayana Murthy";
var arr = str.split(" ", 3);
// var arr = str.split(" ")

var fn = arr[0];
var mn = arr[1];
var ln = arr[2];

console.log("First Name: " + fn);
console.log("Middle Name: " + mn);
console.log("Last Name: " + ln);

</script>

Q.No.

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Q4

write a JS that will replace a specified value with another value in a string

String = "I will fail"

Replace "fail" by "pass"

→ <script>

```
var mystr = "I will fail";
```

```
var newstr = mystr.replace("fail", "pass");
```

```
document.write(newstr);
```

</script>

Q

~~Forms~~ ~~Forms~~ = ~~20x~~

~~Forms~~ ~~20~~ = ~~20x~~

~~Forms~~ ~~50~~ = ~~20x~~

~~Forms~~ ~~100~~ = ~~20x~~

~~Forms~~ ~~200~~ = ~~20x~~

~~Forms~~ ~~300~~ = ~~20x~~

~~Forms~~ ~~400~~ = ~~20x~~

~~Forms~~

| | | | | | | | | |
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Compare concat() and join() method.

| <u>Parameters</u> | <u>concat()</u> | <u>join()</u> |
|---------------------------|--|---|
| <u>Purpose</u> | combines two or more array or values into a new array. | Converts the array into a string, with specified by specified delimiter. |
| <u>Original Array</u> | Not modified | modified |
| <u>Data type returned</u> | Array | String |
| <u>Complexity</u> | It's slower due to array copying compared. | It separates each value by comma, each element by specified separator by default - comma, |
| <u>Syntax</u> | array.concat(
(arr1, arr2...arrN)) | array.join(separator) |
| <u>Example</u> | var a = ["CO", "IF"];
var b = ["EJ", "CE"];
var c = a.concat(b);
c
[CO IF BE CE] | var a = [1, 2, 3];
var b = a.join("-");
b
1 - 2 - 3 |

Q No. Q No. Q No. Q No.

(Q7) Differentiate between push() & join() method of array object with respect to use, syntax, return value and example.

| Parameter | push() | join() |
|----------------|---|--|
| use | This method add one or more elements to end of array. | Converts array into string, with specified separator |
| Syntax | array.push(element, element...element) | array.join(separator)
Separator is optional
By default comma (,) is, |
| Return Value | Returns the new length of array after appending elements to array. | Returns a string after adding separator needed and elements. |
| Example | var a = [1, 2, 3, 4];
a.push(5, 6);
var b = a.join();
document.write(b); | var a = [1, 2, 3, 4];
var c = a.join();
document.write(c); |
| Output | 1 2 3 4 5 6
1, 2, 3, 4, 5, 6 | 1 2 3 4
1, 2, 3, 4 |

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Q3

Differentiate between `shift()` and `push()` methods of an Array Object.

Shift()

It is used to delete first element of array.

It is used to add element at end of array.

It is used to remove element add element.

Syntax

`array.shift()`

Syntax

`array.push(element1, element2, ..., elementN)`

Example

```
var arr = [1, 2, 3, 4]
document.write(arr);
arr.shift();
document.write(arr);
```

Output

```
1 2 3 4  
2, 3, 4
```

Example

```
var arr = [1, 2, 3, 4]
document.write([a]);
arr.push(5, 6, 7);
document.write(a);
```

Output

```
1 2 3 4  
1 2 3 4 5 6
```

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Program

Write JavaScript function that accepts a string as a parameter and find length of string.

```
>>> <script type="text/javascript">  
function Stringlength(str)  
{  
    return str.length;  
}  
var string1=prompt("Enter string");  
var b= Stringlength(string1);  
document.write("Length of String :"  
+string1.length);
```