Day 05:

Do the below programs in anonymous function & IIFE

Print odd numbers in an array

ANONYMOUS

*let* a = [1, 2, 3, 4, 5, 6, 7, 8, 9];

*var* odd = *function* () {

  for (*var* i = 0; i < a.length; i++) {

    if (a[i] % 2 !== 0) {

      console.log(a[i]);

    }

  }

};

odd();

IIFE

(*function* () {

*let* a = [1, 2, 3, 4, 5, 6, 7, 8, 9];

  for (*var* i = 0; i < a.length; i++) {

    if (a[i] % 2 !== 0) {

      console.log(a[i]);

    }

  }

})();

OUTPUT

1

3

5

7

9

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Convert all the strings to title caps in a string array

ANONYMOUS

*var* arr = ["hi hello", "iNcrEdible iNDiA", "HELLO GUVI"];

arr.forEach(*function* (*str*) {

*str* = *str*.toLowerCase().split(" ");

  for (*var* i = 0; i < *str*.length; i++) {

*str*[i] = *str*[i].replace(/\b(\w)/g, (*s*) *=>* *s*.toUpperCase());

  }

  console.log(*str*.join(" "));

});

IIFE

(*function* () {

*var* arr = ["hi hello", "iNcrEdible iNDiA", "HELLO GUVI"];

  arr.forEach((*str*) *=>* {

*str* = *str*.toLowerCase().split(" ");

    for (*var* i = 0; i < *str*.length; i++) {

*str*[i] = *str*[i].replace(/\b(\w)/g, (*s*) *=>* *s*.toUpperCase());

    }

    console.log(*str*.join(" "));

  });

})();

OUTPUT:

Hi Hello

Incredible India

Hello Guvi

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Sum of all numbers in an array

ANONYMOUS

*var* arr = [1, 2, 3, 4, 5];

*var* sum = arr.reduce(*function* (*a*, *b*) {

  return *a* + *b*;

});

console.log(sum);

IIFE

(*function* () {

*var* arr = [1, 2, 3, 4, 5];

*var* sum = arr.reduce(*function* (*a*, *b*) {

    return *a* + *b*;

  });

  console.log(sum);

})();

OUTPUT

15

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Return all the prime numbers in an array

ANONYMOUS

*var* prime = *function* (*a*) {

*a*.forEach((*num*) *=>* {

    if (*num* <= 1) {

      return false;

    }

    for (*var* i = 2; i <= *num* / 2; i++) {

      if (*num* % i === 0) {

        return false;

      }

    }

    console.log(*num*);

  });

};

prime([1, 2, 3, 4, 5, 6, 7, 8, 9]);

IIFE

(*function* () {

*var* a = [1, 2, 3, 4, 5, 6, 7, 8, 9];

  a.forEach((*num*) *=>* {

    if (*num* < 2) {

      return false;

    }

    for (*var* i = 2; i <= *num* / 2; i++) {

      if (*num* % i === 0) {

        return false;

      }

    }

    console.log(*num*);

  });

})();

OUTPUT

2

3

5

7

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Return all the palindromes in an array

ANONYMOUS

*var* arr = ["mom", "man", "did"];

*let* pal = [];

arr.forEach(*function* (*str*) {

*let* rev = *str*.split("").reverse().join("");

  for (*var* i = 0; i < arr.length; i++) {

    if (arr[i] === rev) {

      pal.push(rev);

    }

  }

});

console.log(...pal);

IIFE

(*function* () {

*var* arr = ["mom", "man", "did"];

*let* pal = [];

  for (*var* i = 0; i < arr.length; i++) {

*let* rev = arr[i].split("").reverse().join("");

    if (arr[i] === rev) {

      pal.push(rev);

    }

  }

  console.log(...pal);

})();

OUTPUT

mom did

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Return median of two sorted arrays of same size

ANONYMOUS

*var* median = *function* () {

*let* a = [1, 2, 3, 4, 5];

*let* b = [9, 8, 7, 6, 5];

*let* ab = a.concat(b).sort();

*let* median;

  for (*var* i = 0; i < ab.length; i++) {

*let* middle = ab.length / 2;

    median = (ab[middle] + ab[middle - 1]) / 2;

  }

  console.log(median);

};

median(); //output 5

IIFE

(*function* () {

*let* a = [1, 2, 3, 4, 5];

*let* b = [9, 8, 7, 6, 5];

*let* ab = a.concat(b).sort();

*let* median;

  for (*var* i = 0; i < ab.length; i++) {

*let* middle = ab.length / 2;

    median = (ab[middle] + ab[middle - 1]) / 2;

  }

  console.log(median);

})(); //output 5

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Remove duplicates from an array

ANONYMOUS

*var* removeDupes = *function* (*arr*) {

*let* unique = [...new *Set*(*arr*)];

  console.log(...unique);

};

removeDupes([1, 2, 1, "guvi", "guvi", "a", "b", "a"]);

IIFE

(*function* () {

*let* arr = [1, 2, 1, "guvi", "guvi", "a", "b", "a"];

*let* unique = [...new *Set*(arr)];

  console.log(...unique);

})();

OUTPUT

1 2 guvi a b

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Rotate an array by k times

ANONYMOUS

*var* rotate = *function* (*arr*, *k*) {

  for (*var* i = 0; i <= *k*; i++) {

*let* last = *arr*.pop();

*arr*.unshift(last);

  }

  console.log(...*arr*);

};

rotate(["a", "b", "c", "d", "e"], 2); //output  c d e a b

IIFE

(*function* () {

*var* arr = ["a", "b", "c", "d", "e"];

*var* k = 2;

  for (*var* i = 0; i <= k; i++) {

*let* last = arr.pop();

    arr.unshift(last);

  }

  console.log(...arr);

})(); //output  c d e a b

Do the below programs in arrow functions

* 1. Print odd numbers in an array

*let* arr =[1,2,3,4,5,6,7,8,9,10]

*let* odd = arr.filter(*value* *=>* *value*%2 !==0);

console.log(odd)

OUTPUT

[ 1, 3, 5, 7, 9 ]

* 1. Convert all the strings to title caps in a string array

*var* arr = ["hi hello", "iNcrEdible iNDiA", "HELLO GUVI"];

*var* res = arr.map((*str*) *=>*

*str*.toLowerCase().replace(/\b(\w)/g, (*s*) *=>* *s*.toUpperCase())

);

console.log(res);

OUTPUT

[ 'Hi Hello', 'Incredible India', 'Hello Guvi' ]

* 1. Sum of all numbers in an array

*var* arr = [1, 2, 3, 4, 5];

*var* sum = arr.reduce((*a*, *b*) *=>* {

  return *a* + *b*;

});

console.log(sum);

OUTPUT

15

* 1. Return all the prime numbers in an array

*var* a = [1, 2, 3, 4, 5, 6, 7, 8, 9];

  a.map((*num*) *=>* {

    if (*num* < 2) {

      return false;

    }

    for (*var* i = 2; i <= *num* / 2; i++) {

      if (*num* % i === 0) {

        return false;

      }

    }

    console.log(*num*);

  });

OUTPUT

2

3

5

7

* 1. Return all the palindromes in an array

*var* arr = ["mom", "man", "did"];

*let* pal = [];

arr.map((*str*) *=>* {

*let* rev = *str*.split("").reverse().join("");

  for (*var* i = 0; i < arr.length; i++) {

    if (arr[i] === rev) {

      pal.push(rev);

    }

  }

});

console.log(pal);

OUTPUT

[ 'mom', 'did' ]