**1.Programs using anonymous & IIFE function**

1. **Printing odd numbers in an array**

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| **IIFE function** | **Anonymous function** |
| (function(array)  {      for(let i=0; i<array.length;i++)      {          if(array[i]%2!==0)          console.log(array[i])      }  })([1,2,3,4,5,6,7,8,9]) | let oddElements = (function(array)  {      for(let i=0; i<array.length;i++)      {          if(array[i]%2!==0)          console.log(array[i])      }  })  oddElements([1,2,3,4,5,6,7,8,9,11]) |

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

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| **IIFE function** | **Anonymous function** |
| (function(string)  {    let str = string.toLowerCase().split(" ")    for(let i=0;i<str.length;i++)    {        str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1)    }   console.log(str.join(" "))    })("hi i am hemA") | let titleCase = function(string)  {    let str = string.toLowerCase().split(" ")    for(let i=0;i<str.length;i++)    {        str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1)    }    return str.join(" ")    }  console.log(titleCase("hi i am hemA")) |

1. **Sum of all numbers in an array**

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| **IIFE function** | **Anonymous function** |
| (function(sum)  {   let sumValue = 0;   for(let i =0; i<sum.length; i++)   {       sumValue = sumValue + sum[i]   }   console.log(sumValue)  })([1,2,3,4,5]) | let addElements = function(sum)  {   let sumValue = 0;   for(let i =0; i<sum.length; i++)   {       sumValue = sumValue + sum[i]   }   console.log(sumValue)  }  addElements([1,2,3,4,5]) |

1. **Returning prime numbers in an array**

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| **IIFE function** | **Anonymous function** |
| (function(array)  {      let prime = [];      for(let s of array)      {          if(s%2==0)          prime.push(s)      }      console.log(prime)    })([1,2,3,4,5,6]) | let primeArray = function(array)  {      let prime = [];      for(let s of array)      {          if(s%2==0)          prime.push(s)      }      console.log(prime)    }  primeArray([1,2,3,4,5,6]) |

1. **Returning all palindromes in an array**

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| **IIFE function** | **Anonymous function** |
| let array = [ "car", "ada", "racecar", "cool"]  let pal = [];  let str = array.slice(0)  let reversedStr = array.toString().split("").reverse().join("").split(",");  (function(str,reversedStr){      for(let i=0; i<str.length; i++)  {      for(let j=0; j<reversedStr.length; j++)      {          if(str[i]===reversedStr[j])          pal.push(str[i])      }  }  })(str,reversedStr);  console.log(pal) | let array = [ "car", "ada", "racecar", "cool"]  let pal = [];  let str = array.slice(0)  let reversedStr = array.toString().split("").reverse().join("").split(",");  let palArray = (function(str,reversedStr){      for(let i=0; i<str.length; i++)  {      for(let j=0; j<reversedStr.length; j++)      {          if(str[i]===reversedStr[j])          pal.push(str[i])      }  }  });  palArray(str,reversedStr)  console.log(pal) |

1. **Returning median of 2 sorted arrays with same order**

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| **IIFE function** | **Anonymous function** |
| (function(a,b){      let sortedArray = [...a,...b].sort((a,b)=>{return a-b})      let half = sortedArray.length/2;      let median = (sortedArray[half] + sortedArray[half-1])/2      console.log(median)  })([1,22,34,67,55],[3,55,63,111,112]) | let median = (function(a,b){      let sortedArray = [...a,...b].sort((a,b)=>{return a-b})      let half = sortedArray.length/2;      median = (sortedArray[half] + sortedArray[half-1])/2  })  median([1,22,34,67,55],[3,55,63,111,112])  console.log(median) |

1. **Removing duplicates from an array**

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| **IIFE function** | **Anonymous function** |
| let chars = [ 1,2,3,2,4,4,6,8,8];  let uniqueChars = [];  (function(chars){      chars.forEach((s) => {        if (!uniqueChars.includes(s)) {          uniqueChars.push(s);      }    })  })(chars);  console.log(uniqueChars); | let uniqueChars = [];  let uniqueArray = (function(chars){      chars.forEach((s) => {        if (!uniqueChars.includes(s)) {          uniqueChars.push(s);      }    })  });  uniqueArray([ 1,2,3,2,4,4,6,8,8])  console.log(uniqueChars); |

1. **Rotating an array by k times**

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| **IIFE function** | **Anonymous function** |
| (function (array, k) {    let temp = 0;    let len = array.length;    k = k % len;    for (let i = 0; i < k; i++) {       temp = array.pop();       array.unshift(temp);    }    console.log(array)  })([1,2,3,4,5,6], 3); | let rotate = (function (array, k) {    let temp = 0;    let len = array.length;    k = k % len;    for (let i = 0; i < k; i++) {       temp = array.pop();       array.unshift(temp);    }    console.log(array)  })  rotate([1,2,3,4,5,6], 3); |

**2.Programs using arrow function**

1. **Printing odd numbers in an array**

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| **Arrow function** |
| let oddElements = (array) =>  {      for(let i=0; i<array.length;i++)      {          if(array[i]%2!==0)          console.log(array[i])      }  }  oddElements([1,2,3,4,5,6,7,8,9,11]) |

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

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| --- |
| **Arrow function** |
| let titleCase = (string) =>  {    let str = string.toLowerCase().split(" ")    for(let i=0;i<str.length;i++)    {        str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1)    }    return str.join(" ")    }  console.log(titleCase("hi i am hemA")) |

1. **Sum of all numbers in an array**

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| --- |
| **Arrow function** |
| let addElements = (sum) =>  {   let sumValue = 0;   for(let i =0; i<sum.length; i++)   {       sumValue = sumValue + sum[i]   }   console.log(sumValue)  }  addElements([1,2,3,4,5]) |

1. **Returning prime numbers in an array**

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| --- |
| **Arrow function** |
| let primeArray = (array) =>  {      let prime = [];      for(let s of array)      {          if(s%2==0)          prime.push(s)      }      console.log(prime)    }  primeArray([1,2,3,4,5,6]) |

1. **Returning all palindromes in an array**

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| --- |
| **Arrow function** |
| let array = [ "car", "ada", "racecar", "cool"]  let pal = [];  let str = array.slice(0)  let reversedStr = array.toString().split("").reverse().join("").split(",");  let palArray = (str,reversedStr)=>{      for(let i=0; i<str.length; i++)  {      for(let j=0; j<reversedStr.length; j++)      {          if(str[i]===reversedStr[j])          pal.push(str[i])      }  }  };  palArray(str,reversedStr)  console.log(pal) |