// 1) input: Enter no of non-fib series: 10

// output: 4 6 7 9 10

function nonFibonacciSeries(n) {

    let a = 0;

    let b = 1;

    let c = a + b;

    let nonFibNumbers = [];

    let count = 0;

    while (count < n) {

      for (let i = b + 1; i < c; i++) {

        if (count < n) {

          nonFibNumbers.push(i);

          count++;

        }

      }

      a = b;

      b = c;

      c = a + b;

    }

    console.log(nonFibNumbers.join(' '));

  }

  nonFibonacciSeries(10);

// 3) input: Enter no of fib-series: 7

// output: Non prime numbers in the fib series are: 0 1 1 8 .

function fibonacciSeries(n) {

    let a = 0, b = 1;

    let fibNumbers = [a, b];

    for (let i = 2; i < n; i++) {

      let next = a + b;

      fibNumbers.push(next);

      a = b;

      b = next;

    }

    return fibNumbers;

  }

  function isPrime(num) {

    if (num <= 1) return false;

    for (let i = 2; i <= Math.sqrt(num); i++) {

      if (num % i === 0) return false;

    }

    return true;

  }

  function nonPrimeFibonacciSeries(n) {

    let fibNumbers = fibonacciSeries(n);

    let nonPrimeFibNumbers = fibNumbers.filter(num => !isPrime(num));

    console.log('Non prime numbers in the fib series are:', nonPrimeFibNumbers.join(' '));

  }

  nonPrimeFibonacciSeries(7);

// 2) input: Enter no of fib-series: 7

// output: prime numbers in the fib series are: 2 3 5

function fibonacciSeries(n) {

    let a = 0, b = 1;

    let fibNumbers = [a, b];

    for (let i = 2; i < n; i++) {

      let next = a + b;

      fibNumbers.push(next);

      a = b;

      b = next;

    }

    return fibNumbers;

  }

  function isPrime(num) {

    if (num <= 1) return false;

    for (let i = 2; i <= Math.sqrt(num); i++) {

      if (num % i === 0) return false;

    }

    return true;

  }

  function primeFibonacciSeries(n) {

    let fibNumbers = fibonacciSeries(n);

    let primeFibNumbers = fibNumbers.filter(num => isPrime(num));

    console.log('Prime numbers in the fib series are:', primeFibNumbers.join(' '));

  }

  primeFibonacciSeries(7);