Public class PrimeAndFibonacci {

Public static boolean isPrime(int num) {

If (num <= 1) {

Return false;

}

For (int I = 2; I <= Math.sqrt(num); i++) {

If (num % I == 0) {

Return false;

}

}

Return true;

}

Public static void main(String[] args) {

// Part a: Display prime numbers between 1 to 500

For (int I = 1; I <= 500; i++) {

If (isPrime(i)) {

System.out.print(I + “ “);

}

}

System.out.println();

// Part b: Generate the first 10 terms of the Fibonacci sequence

Int n = 10;

Int first = 1;

Int second = 2;

System.out.print(first + “ “ + second + “ “);

For (int I = 2; I < n; i++) {

Int third = first + second;

System.out.print(third + “ “);

First = second;

Second = third;

}

System.out.println();

// Part c: Find the sum of even-valued terms in the Fibonacci sequence up to four million

Int limit = 4000000;

First = 1;

Second = 2;

Int sum = 2; // we already know that the second term is even

While (second <= limit) {

Int third = first + second;

If (third % 2 == 0) {

Sum += third;

}

First = second;

Second = third;

}

System.out.println(“Sum of even-valued terms: “ + sum);

}

}