15.Implement a program to find the first 25 prime numbers using a **do-while** loop. Break the loop if a number is not prime.

public class PrimeNumbersDWL {

public static void main(String[] args) {

int count = 0; // Counter to track the number of prime numbers found

int number = 2; // Start checking from 2, the first prime number

// Loop to find the first 25 prime numbers

do {

if (isPrime(number)) { // Check if the current number is prime

System.out.println(number); // Print the prime number

count++; // Increment the count of prime numbers found

}

number++; // Move to the next number for checking

} while (count < 25); // Continue until 25 prime numbers are found

}

// Method to check if a number is prime

public static boolean isPrime(int num) {

if (num <= 1) {

return false; // Numbers less than or equal to 1 are not prime

}

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

if (num % i == 0) {

return false; // If num is divisible by any number other than 1 and itself, it's not prime

}

}

return true; // If num is not divisible by any number other than 1 and itself, it's prime

}

}