Using the concepts of thread with implementing Runnable interface in Java to find whether a given number is prime or not.

CODE:

import java.util.Scanner;

class PrimeChecker implements Runnable {

private int number;

public PrimeChecker(int number) {

this.number = number;

}

@Override

public void run() {

boolean isPrime = checkPrime(number);

if (isPrime) {

System.out.println(number + " is a prime number.");

} else {

System.out.println(number + " is not a prime number.");

}

}

private boolean checkPrime(int n) {

if (n <= 1) {

return false;

}

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

if (n % i == 0) {

return false;

}

}

return true;

}

}

public class PrimeCheck {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter a number to check if it's prime: ");

int number = scanner.nextInt();

PrimeChecker primeChecker = new PrimeChecker(number);

Thread primeThread = new Thread(primeChecker);

primeThread.start();

scanner.close(); // Closing the scanner object

}

}

OUTPUT:

C:\javap>javac PrimeCheck.java

C:\javap>java PrimeCheck

Enter a number to check if it's prime: 56

56 is not a prime number.

