

Day 20 coding Statement : Write a program to identify if the number is Prime number or not

Description

Get a number as input from the user and check whether that number is prime or not.

A prime number is a number with factors as 1 and that number itself.

Input

1

Output

1 is not a prime number

Input

5

Output

5 is a prime number

Code

```
import java.util.Scanner;

public class PrimeNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int number = scanner.nextInt();
        boolean isPrime = true;
        if (number <= 1) {
            isPrime = false;
        } else {
            for (int i = 2; i <= Math.sqrt(number); i++) {
                if (number % i == 0) {
```

```
        isPrime = false;
        break;
    }
}
}

if (isPrime) {
    System.out.println(number + " is a prime number");
} else {
    System.out.println(number + " is not a prime number");
}

scanner.close();
}
}
```

Output

```
java -cp /tmp/2J4dPjFAyn PrimeNumber
Enter a number: 1
1 is not a prime number
|
```

Output

```
java -cp /tmp/2J4dPjFAyn PrimeNumber
Enter a number: 5
5 is a prime number
```