1 Write a program to find the Greatest Common Divisor (GCD) of two numbers using a while loop.

Input: 12 18
Output: 6

Input: 7 13
Output: 1

2 Check whether a number is a perfect number using a while loop.

A perfect number is a positive integer that equals the sum of its proper positive divisors (all divisors excluding the number itself). For example, 6 is perfect because its proper divisors (1, 2, 3) add up to 6 (1 + 2 + 3 = 6)

Input: 6
Output: Perfect

Input: 10
Output: Not Perfect

3   Convert uppercase to lowercase and lowercase to uppercase using a while loop.

Input: "HeLLo"
Output: "hEllO"

Input: "JAVA"
Output: "java"

4 Print pattern for n lines

1

0 1

1 0 1

0 1 0 1

5 Hourglass Star Pattern

```
* * * * *

  * * *

    *

  * * *

* * * * *
```

6 Zig-Zag Star Pattern

```
*   *   *

  *   *

*   *   *
```

Input: columns = 9

Hint : modulus logic + row control