• Write a program to print all divisors of given number.

Example:

Input: 6

Output: 1236

• Write a program to print sum of all divisors of given number.

Example:

Input: 6

Output: 12

• Write a program to check if a given number is perfect or not.

<u>Hint:</u> A number is a perfect number if is equal to sum of its proper divisors, that is, sum of its positive divisors excluding the number itself.

Example: 6,28,496,8128 are perfect numbers.

• Write a program to check to print all perfect numbers in the given range.

Note: Accept the Start range and End range value from user.

• Write a program to check if a given number is Fibonacci number.

Example:

Input:8

Output : Yes

Input: 34

Output: Yes

Input: 41

Output: No

<u>Hint:</u> A number is Fibonacci if and only if one or both of (5*n2 + 4) or (5*n2 - 4) is a perfect square

 Write a program to check if given number is perfect square or not.

<u>Hint:</u> Perfect square formula: $N = x^2$

If x = 9, and N = x2. This means, $N = 9^2 = 81$. Here, 81 is a perfect square because it is the square of a whole number, 9.

Note: You will need to use the library math(just like we used 'random' library) and function 'sqrt()' from this library.

Example:

import math

s = int(math.sqrt(81))
print(s)