

DSA- Tutorial-1

14-01-2025

Question 1 (5 Marks)

Prove that the sum of the first n Fibonacci numbers is:

$$F_1 + F_2 + \cdots + F_n = F_{n+2} - 1$$

where F_k is the k -th Fibonacci number, and $F_1 = F_2 = 1$.

Question 6(5 Marks)

Prove that $7^n - 1$ is divisible by 6 for all $n \geq 1$.