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In [1]: #Create a python function that when you inputs a number the function you

# python program to check if x is a perfect square
import math

# A utility function that returns true if x is perfect square
def isPerfectSquare(x):
    s = int(math.sqrt(x))
    return s*s == x

# Returns true if n is a Fibonacci Number, else false
def isFibonacci(n):

    # n is Fibonacci if one of 5*n*n + 4 or 5*n*n - 4 or both
    # is a perfect square
    return isPerfectSquare(5*n*n + 4) or isPerfectSquare(5*n*n - 4)

# A utility function to test above functions
for i in range(1,11):
    if (isFibonacci(i) == True):
        print(i ,"is a Fibonacci Number")
    else:
        print(i,"is a not Fibonacci Number")

1 is a Fibonacci Number
2 is a Fibonacci Number
3 is a Fibonacci Number
4 is a not Fibonacci Number
5 is a Fibonacci Number
6 is a not Fibonacci Number
7 is a not Fibonacci Number
8 is a Fibonacci Number
9 is a not Fibonacci Number
10 is a not Fibonacci Number
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In []: