①Sol

```
For i in range(1001):
    num = i
    result = 0
    n = len(str(i))
    while(i!=0):
    digit = i%10
    result = result + digit**n
      i = i//10
      if num == result:
        print(num)
print("num is a Amstrong number")

else:
    print("num is not a Amstrong number")
```

② import math

```
def perfect_square(x):
    s = int(math.sqrt(x))
    return s*s == x
n = int(input("Enter the numbers:"))
result1 = 5*(n*n)+4
result2 = 5*(n*n)-4
if perfect_square(result1) or perfect_square(result2):
    print(n," is Fibonacci number")
else:
    print(n," is not fibonacci number")
```