```python
def happy(n):
    k=0
    l=n
    while(n>0):
        b=n%10
        k=k+b**2
        n=n//10
    if(k==1):
        print("true")
    elif(k==l*1):
        print("false")
    else:
        return happy(k)
n=int(input("n="))
if(n>0):
    happy(n)
else:
    print("false")
```

IDLE Shell 3.10.4

File Edit Shell Debug Options Window Help

```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=========== RESTART: C:/Users/vishnu/Documents/python.py/day1 3rd.py ===========
n=19
true
>>>
=========== RESTART: C:/Users/vishnu/Documents/python.py/day1 3rd.py ===========
n=2
false
>>>
=========== RESTART: C:/Users/vishnu/Documents/python.py/day1 3rd.py ===========
n=-1
false
>>>
=========== RESTART: C:/Users/vishnu/Documents/python.py/day1 3rd.py ===========
n=0
false
>>>
=========== RESTART: C:/Users/vishnu/Documents/python.py/day1 3rd.py ===========
n=5
false
>>>
```