

2.write a program to check the given Number is arm strong or not using recursion method

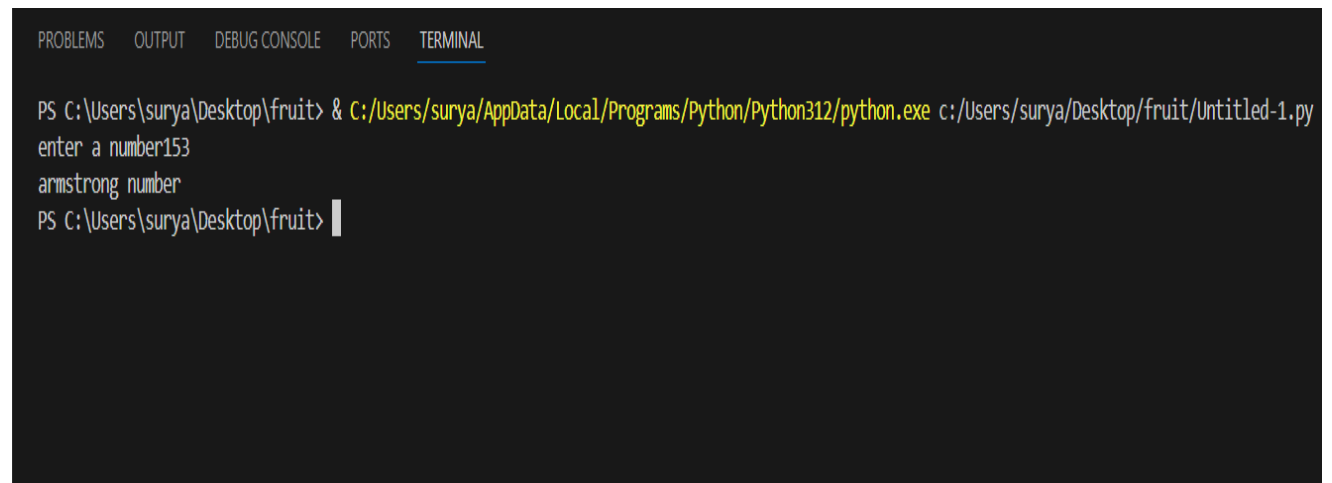
PROGRAM:

```
def arm(num):  
    if num==0:  
        return num  
    else:  
        return pow((num%10),order)+arm(num//10)  
num=int(input("enter a number"))  
order=len(str(num))  
sum=arm(num)  
if sum==int(num):  
    print("armstrong number")  
else:  
    print("not armstrong")
```

TIME COMPLEXITY: $O(\log n)$

INPUT:153

OUTPUT:



```
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL  
PS C:\Users\surya\Desktop\fruit> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Desktop/fruit/Untitled-1.py  
enter a number153  
armstrong number  
PS C:\Users\surya\Desktop\fruit>
```