

Experiment no – 01 (E)

Aim: Write a function to check the input value is Armstrong and also write the function for Palindrome.

Theory:-

Practical Implementation:-

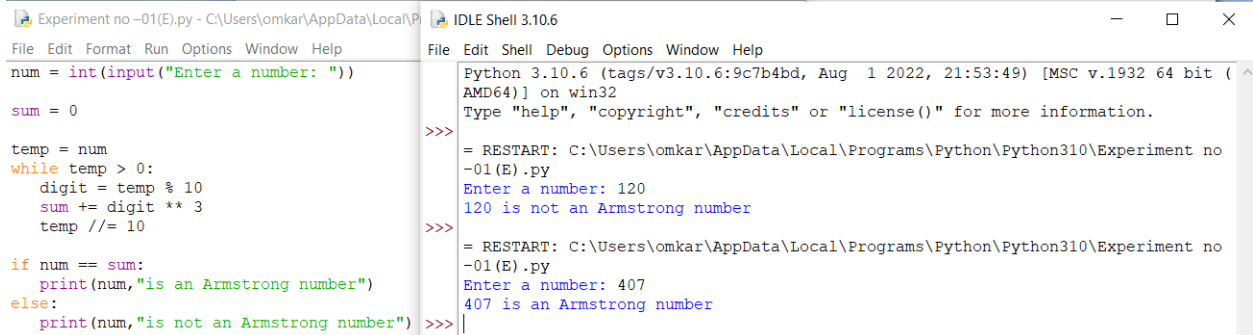
Code:-

```
num = int(input("Enter a number: "))

sum = 0

temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

if num == sum:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an Armstrong number")
```

Output:-

The screenshot displays a Python IDE with two panes. The left pane shows the source code for a program that checks if a number is an Armstrong number. The right pane shows the execution output, including the Python version, file path, and the results of two test cases: 120 (not an Armstrong number) and 407 (is an Armstrong number).

```
Experiment no -01(E).py - C:\Users\omkar\AppData\Local\Programs\Python\Python310\Python.exe
File Edit Format Run Options Window Help

num = int(input("Enter a number: "))
sum = 0

temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

if num == sum:
    print(num, "is an Armstrong number")
else:
    print(num, "is not an Armstrong number")
```

```
IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help

Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug 1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>> = RESTART: C:\Users\omkar\AppData\Local\Programs\Python\Python310\Experiment no -01(E).py
Enter a number: 120
120 is not an Armstrong number

>>> = RESTART: C:\Users\omkar\AppData\Local\Programs\Python\Python310\Experiment no -01(E).py
Enter a number: 407
407 is an Armstrong number

>>>
```

Conclusion:- This is program successfully run.