

Name : S Mohamed Ahsan

Reg No : 212223240089

## Experiment-4 ARMSTRONG NUMBER

---

### Aim:

---

Write a python program to check the number is Armstrong number or not and inspect for failures.

### Algorithm

---

1. Start the program.
2. Read an integer input number.
3. Initialize the variables current\_digit, sum = 0, and num = number.
4. Repeat Steps 5 to 7 until num > 0
5. current\_digit = (num % 10).
6. sum = sum + (current\_digit \* current\_digit \* current\_digit). 7. Stop the program.
7. num = num / 10.
8. Check if sum == number. If true, print "It is an Armstrong Number." Otherwise, print "It is not an Armstrong Number."
9. Stop the program.

### Program

---

```
num=int(input("Enter a number :"))
power=len(str(num))
total=sum(int(digit)**power for digit in str(num))
if num==total:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an Armstrong number")
```

## Output

---

```
● PS C:\Users\admin\Desktop\SEM-5\Software Testing> python EX4.py
Ente a anumber :123
123 is not an Armstrong number
● PS C:\Users\admin\Desktop\SEM-5\Software Testing> python EX4.py
Ente a anumber :153
153 is an Armstrong number
● PS C:\Users\admin\Desktop\SEM-5\Software Testing> python EX4.py
Ente a anumber :1634
1634 is an Armstrong number
● PS C:\Users\admin\Desktop\SEM-5\Software Testing> python EX4.py
Ente a anumber :9898
9898 is not an Armstrong number
```

## Result

---

Thus, the python program to find an Armstrong number has been executed successfully.