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### SBL- Python- Experiment 3

→ Aim: Write a program to check whether a given number is armstrong or not.

- Theory:
- (1) Armstrong number is a number that is sum of its own digits each raised to the power of the number's digits.
  - (2) We can find wheather a number is an armstrong number as not using a while loop.
  - (3) The loop will run untill the condition satisfies.
  - (4) Then we check if the condition satisfies and if the condition matches the required for a number to be an armstrong number.

→ Program:

```
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:

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Enter a number : 105

is not an armstrong number.

→ Result: Thus as we see asking the user for an input and then we run it through our while loop.  
As seen the number taken isn't an armstrong number.