

Aim: Write the program for the following: (by using control statements and control structure)

(E). Write a function to check the input value is Armstrong and also write the function for palindrome.

Theory: -

Practical Implementation:-

```
# Python program to check if the number provided by the user is an Armstrong
number or not

def armstrong(num):
    num=0
    # find the sum of the cube of each digit
    temp=num
    while temp>0:
        digit=temp%10
        sum+=digit**3
        temp//=10
    # display the result
    if num == sum:
        print(num,"is an armstrong number")
    else:
        print("is not an armstrong number")

def palindrome(num):
    n=num
    rev=0
    while num !=0:
        rev=rev *10
        rev=rev +int(num%10)
        num=int(num/10)
```

```

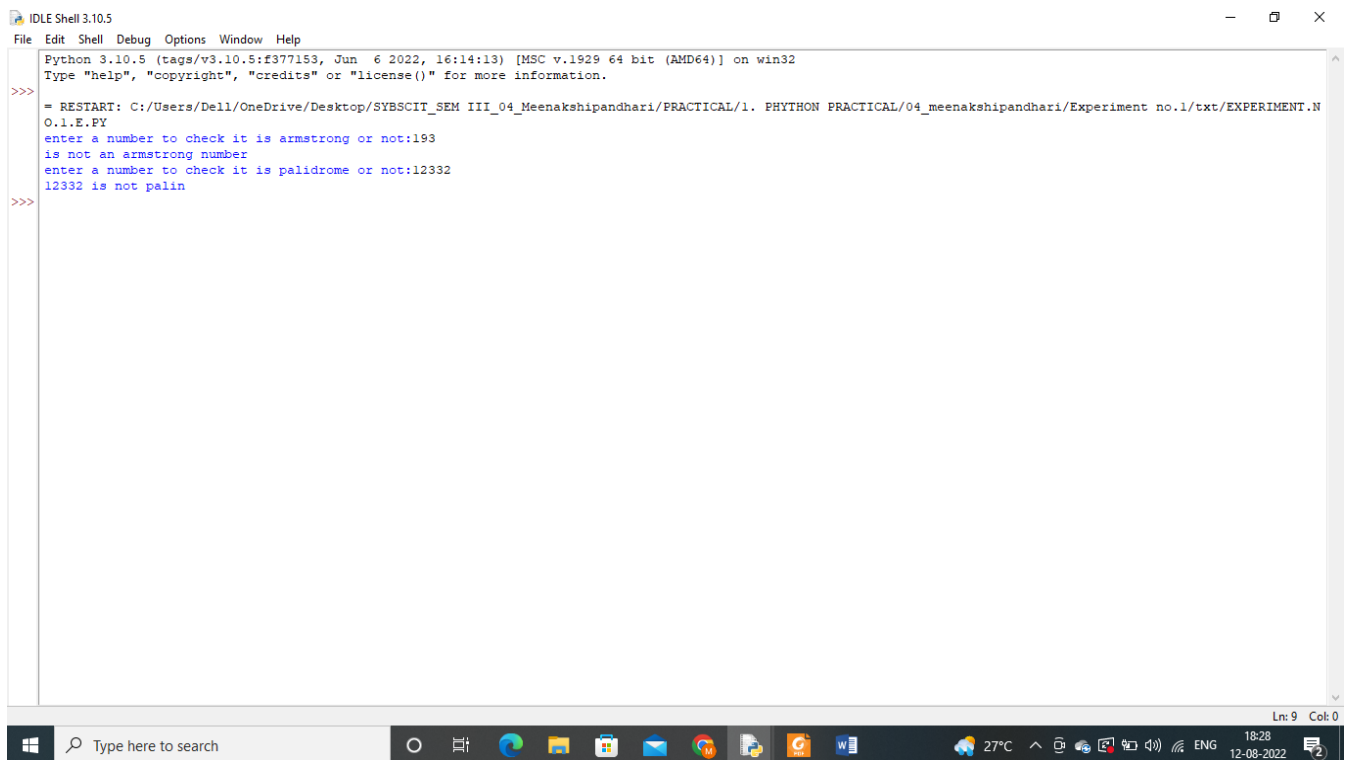
    if n== rev:
        print(n,"is pelindrome number")
    else:
        print(n,"is not palin")

# take input from the user
num=int(input("enter a nummber to check it is armstrong or not:"))
armstrong(num)

# take input from the user
num=int(input("enter a number to check it is palindrome or not:"))
palindrome(num)

```

output:-



```

IDLE Shell 3.10.5
File Edit Shell Debug Options Window Help
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:/Users/Dell/OneDrive/Desktop/SYBSCIT_SEM III_04_Meenakshipandhari/PRACTICAL/1. PHYTHON PRACTICAL/04_meenakshipandhari/Experiment no.1/txt/EXPERIMENT.N
O.1.E.PY
enter a number to check it is armstrong or not:193
is not an armstrong number
enter a number to check it is palidrome or not:12332
12332 is not palin
>>>

```

Conclusion:-