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.

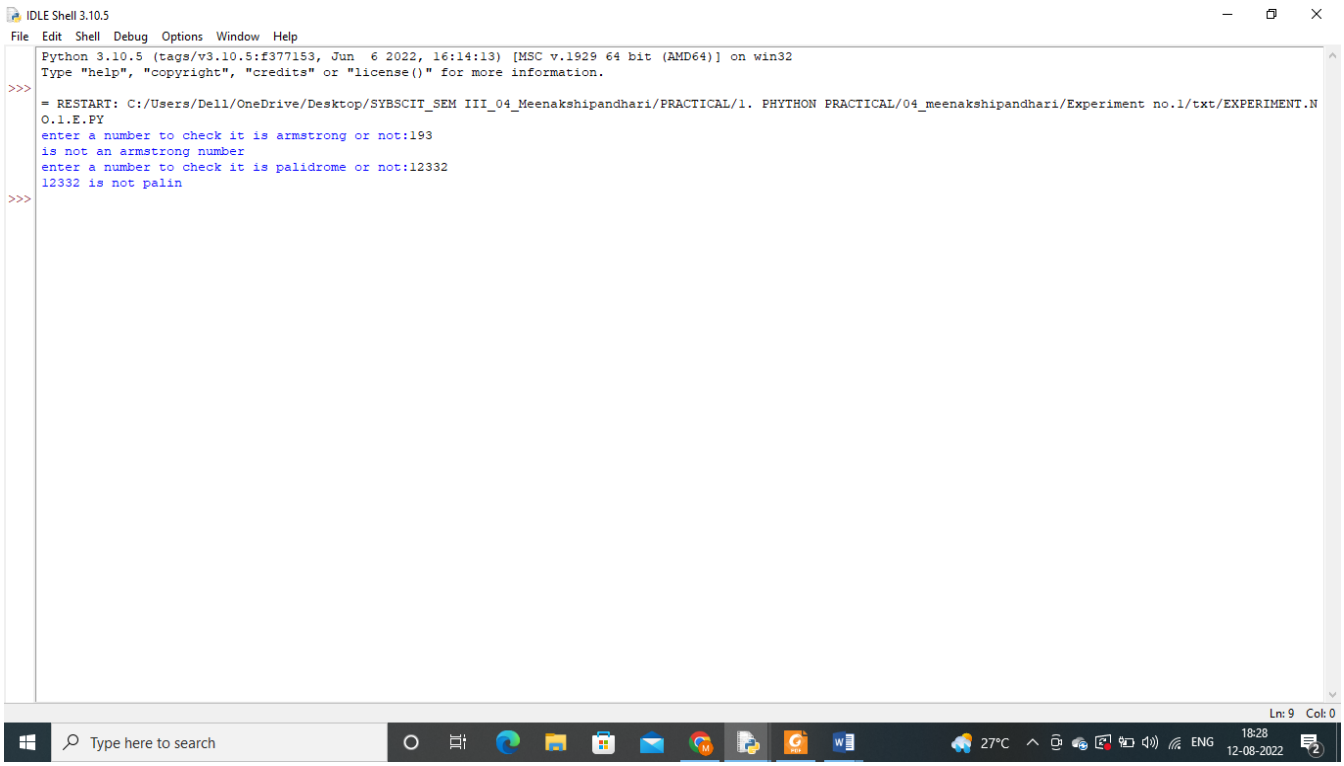
Theory: -

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:-



Conclusion:-