### To check Perfect number or not

```
In [3]:
         n=int(input("enter any number to check perfect number or not : "))
         sum=0
         for i in range(1,n):
             if n%i==0:
                 sum=sum+i
                 print(i)
         if sum==n:
             print("{} is a perfect number".format(n))
             print("{} is not a perfect number".format(n))
        enter any number to check perfect number or not : 28
        2
        4
        7
        14
        28 is a perfect number
```

## To check number is Armstrong or Not

```
num=int(input("ente any number to check number is Armstrong or not: "))
sum=0
a=num
while a>0:
    rem=a%10
    sum=sum+rem**3
    a=a//10
    # print(sum)
if sum==num:
    print("{} is an Armstrong number ".format(num))
else:
    print("{} is not an Armstrong number".format(num))
```

ente any number to check number is Armstrong or not: 153 153 is an Armstrong number

# To check no is strong number

```
num=int(input("enter any number to check strong number : "))
s=0
fact=1
a=num
while a>0:
    rem=a%10
for rem in range(1,rem+1):
    fact=fact*rem
    s=s+fact
    rem=rem+1
```

```
num=num//10
  #sum=sum+fact

if s==num:
    print("{} is a strong number ".format(num))

else:
    print("{} is not a strong number".format(num))
```

enter any number to check strong number: 145

## Didplay letter

""" P PY PYT PYTH PYTHO PYTHON """

```
In [2]:
    arman= "PYTHON"
    x=0
    for i in arman:
        x+=1
        print(arman[0:x])

P
    PY
    PYT
    PYTH
    PYTHO
    PYTHON
```

### WAP to check number is PALINDROME or NOT.

```
In [6]:
    num=int(input("Enter a number to check number is polindrome or not: "))
    sum=0
    a=num
    while num>0:
        rem=num%10
        sum=sum*10+rem
        num=num//10
    if a==sum:
        print("{} is a polindrome ".format(a))
    else:
        print("{} is not a polindrome ".format(a))

Enter a number to check number is polindrome or not: 12321
12321 is a polindrome
In []:
```