In [4]:
```python
# check given number is palindrom or not
num=int(input('Enter a number: '))
temp=num
n=num
i=0

# to check the length of number
while(temp//10!=0):
    i=i+1
    temp=temp//10

sum=0
while i>=0:
    rem=n%10
    sum=sum+rem*(10**i)
    n=n//10
    i=i-1
if sum==num:
    print(num, 'is a palindrom')
else:
    print(num,'NOT a palindrom')
```

```
Enter a number: 1234321
1234321 is a palindrom
```

In [12]:
```python
# check given string is palindrom
str=input('Enter a string: ')
str1=str[::-1]
if str==str1:
    print(str,'- is a palindrom')
else:
    print(str,'- NOT palindrom')
```

```
Enter a string: malayalam
malayalam
malayalam - is a palindrom
```

In [34]:
```python
#check given number is perfect number or not
n=int(input('Enter a number: '))
sum=0
num=n
print('proper divisors: ',end=' ')
for i in range(1,n):
    if n%i==0:
        sum+=i
        print(i,end=' ')  # this will print the proper divisors
print()
if sum==num:
    print(num,'is a perfect number')
else:
    print(num,'is NOT perfect number')
```

```
Enter a number: 28
proper divisors:  1 2 4 7 14
28 is a perfect number
```

In [36]:
```python
# program to reverse a string
str=input('Enter a String: ')
print('Reverse of string is:  ', str[::-1])
```

```
Enter a String: gnirts a esrever ot
Reverse of string is:   to reverse a string
```

In [ ]: