12.Write a program to find the perfect number.

PROGRAM:

```
def per(num):
 sum=0
 for i in range(1,num):
 if num%i==0:
 sum+=i
 if sum==num:
 return True
 else:
 return False
a=28
if per(a):
 print("Perfect number")
else:
 print("Not a perfect number")
```

OUTPUT:

```
Perfect number
PS C:\Users\surya> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Untitled-1.py
Perfect number
PS C:\Users\surya> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Untitled-1.py
Perfect number
PS C:\Users\surya> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Untitled-1.py
Perfect number
PS C:\Users\surya> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Untitled-1.py
Perfect number
PS C:\Users\surya> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Untitled-1.py
```

TIME COMPLEXITY:

Time complexity for the above code is

F(n)=O(n)