```python
# Fermat Theorem - Teste de Primalidade
def fermat(n):
    if n == 2:
        return True
    if not n & 1:
        return False
    return pow(2, n-1, n) == 1

# Read all input at once
import sys
from itertools import imap # not needed in Python 3, use map
    instead
data = imap(int, sys.stdin.read().split())
scan = data.next # or data.__next__ if you happen to use
    Python 3

# print a list of numbers separated by space (or things that
    can be cast to str)
print " ".join(map(str, L)) # L is the list

# Custom Sort
def qsort(inlist):
    if inlist == []:
        return []
    else:
        pivot = inlist[0]
        lesser = qsort([x for x in inlist[1:] if x < pivot])
        greater = qsort([x for x in inlist[1:] if x >= pivot
            ])
        return lesser + [pivot] + greater

# Merge sort
def mergeSort(alist):
    if len(alist)>1:
        mid = len(alist)//2
        lefthalf = alist[:mid]
        righthalf = alist[mid:]

        mergeSort(lefthalf)
        mergeSort(righthalf)

        i=0
        j=0
        k=0
        while i < len(lefthalf) and j < len(righthalf):
            if lefthalf[i] < righthalf[j]:
                alist[k]=lefthalf[i]
                i=i+1
            else:
                alist[k]=righthalf[j]
                j=j+1
            k=k+1

        while i < len(lefthalf):
            alist[k]=lefthalf[i]
            i=i+1
            k=k+1

        while j < len(righthalf):
            alist[k]=righthalf[j]
            j=j+1
            k=k+1

#Save interactiveShell content
import readline
readline.write_history_file('path.py')
```