Assignment 3

Write a bash program called *producer* and a C program called *consumer.c*. A text-based data file called *storage* initially contains an integer number between 5 and 90.

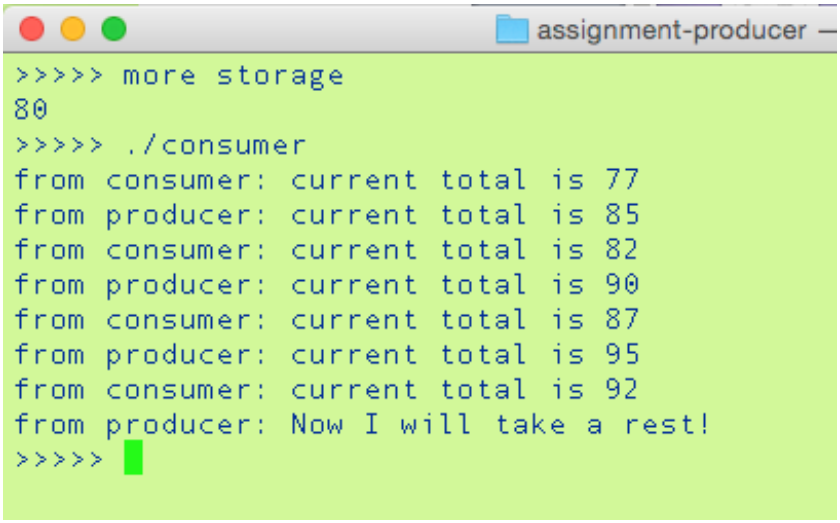
The producer checks the number in the storage. If the current number plus 8 will be 100 or larger, it will terminate. Otherwise, it will increase the number in the storage by 8 and then call the consumer to continue.

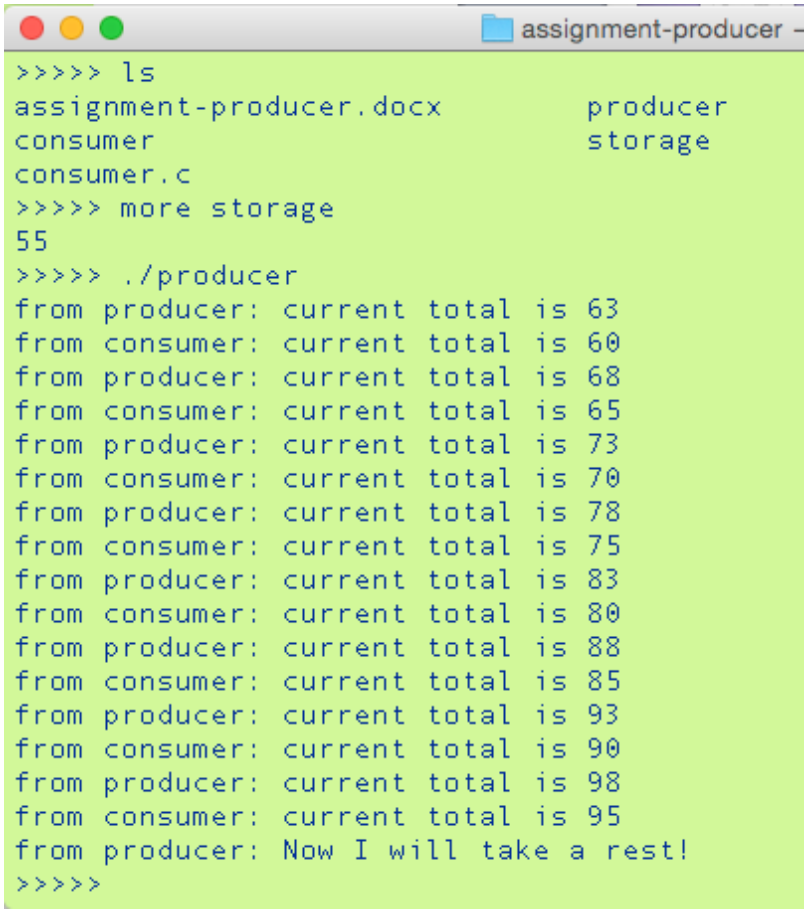
The consumer decreases the number in the storage by 3, and then calls the producer to continue.

Both the producer and the consumer can be the starter.

The C program must use system call I/O. No standard I/O library functions are allowed. It must *fork* a separate process to call the producer to continue.

Sample runs:




assignment-producer -
>>>>> ls
assignment-producer.docx
consumer
consumer.c
producer
storage
>>>>> more storage
55
>>>>> ./producer
from producer: current total is 63
from consumer: current total is 60
from producer: current total is 68
from consumer: current total is 65
from producer: current total is 73
from consumer: current total is 70
from producer: current total is 78
from consumer: current total is 75
from producer: current total is 83
from consumer: current total is 80
from producer: current total is 88
from consumer: current total is 85
from producer: current total is 93
from consumer: current total is 90
from producer: current total is 98
from consumer: current total is 95
from producer: Now I will take a rest!
>>>>>