MM«M ----jGRASP exec: java gcd  
MM§MEnter first number:   
¼¼§M8  
MM§MEnter second number:   
¼¼§M6  
MM§MGCD of given two numbers is: 2  
MM©M ----jGRASP: operation complete.

Recursive trace:

gcd(8,6)

↑ ↓

gcd(6,2)

↓ ↑

gcd(2,0)

Question 2:

Gcd(m,n) = gcd(n,b) where b = m % n

1. Assume c=gcd(m,n) and d=gcd(n,b)

M=n\*a+b

So m%c=0 and n%c=0

== na%c=0

== (m-na)%c=0

== c is the common factor of na and b

== c <= d

1. D is gcd(n,b)

== n%d=0

B%d=0

== na%d=0

(na+b)%d=0

== m%d=0

So d is the common factor of m and n

== d <= c