```
public static int gcd(int a, int b) {
  int r = 0;
  while (a % b != 0) {
    r = a % b;
    a = b;
    b = r;
  }//mod check loop
  return b;
}//gcd

gcd(39,24)
```

Loop	R	A	B
0	0	39	24
1	15	24	15
2	9	15	9
3	6	9	6
4	3	6	3
5			

Return 3