```
Int GCD(int x, int y) {
System.out.println("Error");                1
int i;                                       1
while (i! =0) {                              n
if(i>=y&&x!=0) {                             1
i=x;                                         1
x=y;                                         1
y=i % y;                                     1
}
}
return x;                                    1
}
```

(O)GCD = 1 + 1 + n(1+1+1+1) + 1

= 2 + 4n + 1

= 0 + 4n + 0

= 1n

= O(n)

=Linear

```
int Hanoi (int n) {
while (n!=1) {                                   n
if (n>1) {                                       1
return 2*hanoi (n-1)+1;                          1
}
}
return 1;                                        1
}
```

(O)Hanoi = n(1+1) + 1

= 2n + 1

= 2n + 0

= 1n

= O(n)

= Linear