

```

1. int gcd(int x, int y)
{
    int temp;
    while(y!=0)
    {
        if(x>=y && x!= 0)
        {
            temp = x;
            x=y;
            y=temp % y;
        }
    }
    return x;
}

```

### Answer

1 + log(n) (1+1+1+1)

1 + log(n) (4)

1 + 4log(n)

0 (Log(n))

```

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

```

### Answer

Log(n) (1 + 1)

Log(n) (2)

2log(n)

0 (log(n))