**PLAYING WITH BITS**

Prateek Bhayia likes to play with bits. One day Prateek bhayia decides to assign a task to his student Sanya. You have help Sanya to complete this task. Task is as follows - Prateek Bhayia gives Q queries each query containing two integers a and b. Your task is to count the no of set-bits in for all numbers between a and b (both inclusive)

**Input Format:**

Read Q - No of Queries, Followed by Q lines containing 2 integers a and b.

**Constraints:**

Q,a,b are integers.

**Output Format**

Q lines, each containing an output for your query.

**Sample Input**

2

1 1

10 15

**Sample Output**

1

17

Program-

#include<iostream>

using namespace std;

int main() {

int t;

cin>>t;

while(t--)

{

int min,max,count=0;

cin>>min>>max;

for(int i=min;i<=max;i++)

{

int temp=i;

while(temp>0)

{

if(temp&1)

{

count++;

}

temp=temp>>1;

}

}

cout<<count<<endl;

}

}