**Generate Binary Numbers**

[queue](http://www.practice.geeksforgeeks.org/tag-page.php?tag=queue&isCmp=0)

[Amazon](http://www.practice.geeksforgeeks.org/tag-page.php?tag=Amazon&isCmp=1)

Given a number n, Write a program that generates and prints all binary numbers with decimal values from 1 to n.

**Input:**

The first line of input contains an integer T denoting the number of test cases.  
The first line of each test case is N.  
  
**Output:**

Print all binary numbers with decimal values from 1 to n in a single line.  
  
**Constraints:**

1 ≤ T ≤ 100  
1 ≤ N ≤ 500  
  
**Example:**

Input  
2  
2  
5

Output  
1 10  
1 10 11 100 101

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=776>

#include <iostream>

#include <stdio.h>

using namespace std;

int main() {

int t;

scanf("%d", &t);

while(t--) {

int n;

scanf("%d", &n);

for(int i =1; i<=n; i++) {

int c = i;

std::string bin = "";

while(c > 0) {

bin += (c%2)+'0';

c/=2;

}

std::reverse(bin.begin(), bin.end());

cout << bin << " ";

}

printf("\n");

}

return 0;

}