String Formatting

Task

Read the integer, N and print the decimal, octal, hexadecimal, and binary values from $\mathbf{1}$ to N with space padding so that all fields take the same width as the binary value.

Input Format

The first line contains an integer, N.

Constraints

 $1 \le N \le 99$

Output Format

Print N lines. Format the fields as the width of the binary value of N.

Sample Input

17

Sample Output

```
1 1 1 1
2 2 2 10
3 3 3 11
4 4 4 100
5 5 5 101
6 6 6 110
     7 111
8 10
      8 1000
  11
      9 1001
10 12
      A 1010
11 13
      B 1011
12 14
      C 1100
13 15 D 1101
14 16 E 1110
15 17 F 1111
16 20 10 10000
17 21 11 10001
```