String Formatting

Given an integer, n, print the following values for each integer i from 1 to n:

- 1. Decimal
- 2. Octal
- 3. Hexadecimal (capitalized)
- 4. Binary

The four values must be printed on a single line *in the order specified above* for each i from i to i to

Input Format

A single integer denoting n.

Constraints

• $1 \le n \le 99$

Output Format

Print n lines where each line i (in the range $1 \le i \le n$) contains the respective decimal, octal, capitalized hexadecimal, and binary values of i. Each printed value must be formatted to the width of the binary value of n.

Sample Input

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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 7 7 111
8 10 8 1000
9 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
```