Type Casting

Dynd.
Dynd

Introduction!

1. Allows to change data type of a variable from one type to another.

[This things I knowed Already in Python so skipping]

Patterns

value of

④ ~~Fo~~ for every outter loop inner loop will be executed fully.

Rule!

① Divide the pattern as rows/colums
② no of rows .
③ rows (outter loop) . Colum (inner loop)
④ Do it using nested loop.

Time and Space Complexity

(*) What is time complexity?

=> Amount of time taken by algorithm to run as a function of length of input.

TC: O(N) [N: Number of operations].

(*) Why to study T and S Coplexity?

=> 1. Good engineer's always thinks about the complexity of the code written by him.

2. Resources are limited.

3. Measure algorithm to make efficient programs.

4. Asked by interviewer after every solution you give.

(*) What is Space Complexity?

=> Amount of space taken by an algorithm to run as a function of i/p length of input.

④ Units to Represents Complexity!

1. Big O! upper bound [most imp.]
2. Theta θ! Average case
3. Omega Ω! Lower Bound.

⑤ Big O! Complexities!

1. Constant time! O(1)
2. Linear time! O(N)
3. Logarithmic time! O(logN)
4. Quadratic time! O(~~2~~ N^2)
5. Cubic time! O(N^3)

[Nested loop].

→ Low to high

Range! ~→ Big O

O(1), O(logN), O($\sqrt{N}$), O(N), O(nlogN), O(n^2)

O(n^3), O(2^n), O(N!), O(n^2)