- 1. Write a program to count number of bits set in an integer.
- 2. Given N,Print following pattern (FOR N = 5)

ABCDFFDCBA

ABCDDCBA

ABCCBA

ABBA

AA

- 3. Write a program which takes a number as input and prints if its an Armstrong number or not. (Google Armstrong numbers)
- 4. Write a program to calculate roots of a quadratic equations $ax^2 + bx + c = 0$, display them on screen specifying their nature.
- 5. What is the maximum number of squares of size 2x2 that can be fit in a right angled isosceles triangle of base B. One side of the square must be parallel to the base of the isosceles triangle. Base is the shortest side of the triangle

For e.g.:
$$1-0$$
, $2-0$, $3-0$, $4-1$, $5-1$, $6-3$, $7-3$, $8-6$

6. Write a program to print following pattern:

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* *** *** *

** ** ** ***
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7. Write a program to print the following patterns using for loop

