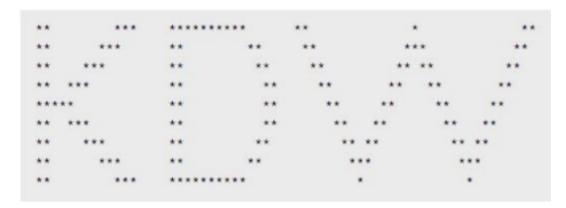
## Day 1 - Programs at Bootcamp -

## Section A - Elements of Programing :- Basic and Built-in Data Types

- 1. Write a program "*PrintThreeNames.java*" that takes three names as input and prints out a proper sentence with the names in the reverse of the order given, so that for example, "java PrintThreeNames Alice Bob Carol" gives "Hi Carol, Bob, and Alice.".
- 2. Write a program "*PrintInitials.java*" that takes initials as input and prints the initials using nine rows of asterisks like the one below.



## Day 1 - Programs at Home

## **Section A - Elements of Programing :- Built-in Data Types**

1. Write a **LeapYear.java** program that takes a year as input and outputs the Year is

a Leap Year or not a Leap Year.

The LeapYear program only works for year >= 1582, corresponding to a year in the Gregorian calendar. So ensure to check for the same. Further the Leap Year is a Year divisible by 4 and not 100 unless it is divisible by 400. For e.g. 1800 is not a Leap Year and 2000 is a Leap Year.

- 2. Write a program SpringSeason.java that takes two int values m and d from the command line and prints true if day d of month m is between March 20 (m = 3, d = 20) and June 20 (m = 6, d = 20), false otherwise.
- 3. Write a program Quadratic.java to find the roots of the equation a\*x\*x + b\*x + c. Since the equation is x\*x, hence there are 2 roots. The 2 roots of the equation can be found using a formula

delta = b\*b - 4\*a\*c

Root 1 of  $x = (-b + \sqrt{(delta)})/(2*a)$ 

Root 2 of x = (-b - sqrt(delta))/(2\*a)

Take a, b and c as input values to find the roots of x.