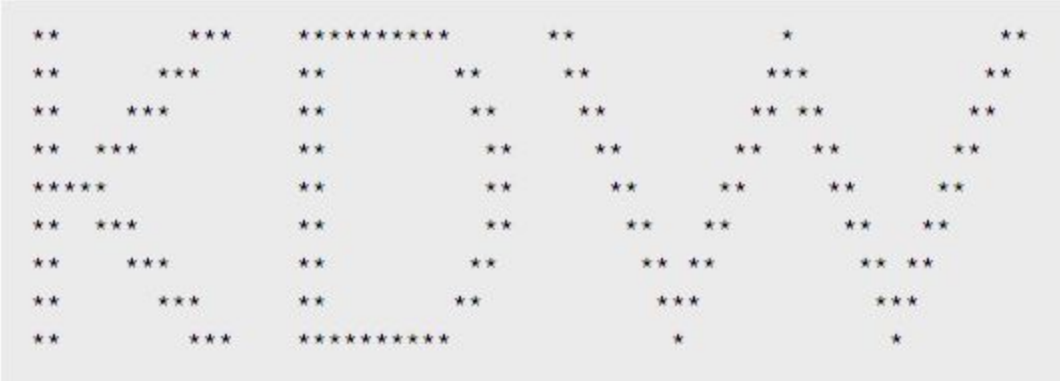
Day 1 - Programs at Bootcamp -

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.



3. Write a program to produce runtime error java.lang.NoSuchMethodError
4. Write a ***IntOpt.java*** program by taking a, b and c as input values and print the following integer operations a + b *c, a * b + c, c + a / b, and a % b + c. Please also understand the precedence of the operators.
5. Similarly write the ***DoubleOpt.java*** program by taking double value and doing the same operations.

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.
4. Write a program ***Distance.java*** that takes two integer command-line arguments x and y and prints the Euclidean distance from the point (x, y) to the origin (0, 0). The formulae to calculate distance = sqrt(x*x + y*y). Use Math.power function
5. Write a program ***SumOfTwoDice.java*** that prints the sum of two random integers between 1 and 6 (such as you might get when rolling dice).