

The difference between stupidity and genius is that genius has its limits. Albert Einstein

## Homework 03

## [String and Math Functions, General Programming Practice]

Note1: Output is made clear by showing boxes so that spaces can be counted.
Note2: Don't do hard coding in task use formulas and functions to generalize your programs.
Note3: In task 7 output on right hand side is of two different runs of the program

## Task 1:

Complete code written inside main function to show output given on right hand side?
String space=" ";
System.out.println("*");
System.out.println("*"+space.substring(0,0)+"*");


## Task 2:

Complete code written inside main function to show output given on right hand side?

```
String space=" ";
System.out.println("*");
System.out.println("*"+space.substring(0,0)+"*");
```



## Use Random Function for Next 3 Tasks

## Task 3

Print 5 real values between 200 and 300

## Task 4

Print 5 integer values between -200 \& -100

## Task 5

Print 5 capital alphabets
Help: Capital alphabets have ASCII code from 65 to 90 . Type cast in char to show alphabet like System.out.println((char)65);//will show $\mathbf{A}$ as output

## Task 6

Write a program to take full name as input from user using nextLine method of Scanner class. Full name includes first name \& last name like "Muhammad Hamid". Take two String variables firstName \& lastName. Assign first part of name in firstName \& second part in lastName. Finally display them in separate line. Don't hard code use appropriate functions from String class.

## Task 7:

| Write program to calculate quadratic roots using formula $\frac{-b+\sqrt{b^{2}-4 a c}}{2 a}$ and $\frac{-b-\sqrt{b^{2}-4 a c}}{2 a}$. Take $\mathrm{a}, \mathrm{b}, \mathrm{c}$ as double values from user, calculate $\times 1, \times 2$ roots and display answer. See the sample run on right hand side. | A:2 |  |
| :---: | :---: | :---: |
|  |  |  |
|  | X1:-1.0 | X2:-1.5 |
|  | A:4 B:9 9 |  |
|  | C:5 X1:-1.0 |  |

