Assignment-1
Object Oriented Programming Lab (CS-13105)
Java Basics: Data Types, Operators, Conditional Statements, and Loops

Note: You are advised to use only basic functionalities of JAVA (not build up libraries)

1. You are required to maintain your own record that includes your name, father's name, date of birth, age (computed with respect to the current date). The age includes years, months and days. You are required to show your record on the display screen such as: for displaying your name, it should display like "Name of the student:" followed by its value. Display of each entity should starts with new line. Use scanner class for getting the input from keyboard.
2. You are required to repeat the problem 1 with constraint that, use buffer class (bufferedReader) in place of Scanner class for taking the input from keyboard.
3. You are required to compute perimeter of a rectangle where length and breadth are taken as float and double respectively from the keyboard. Consider length and breadth as integer while computing its perimeter and computed perimeter is displayed as double.
4. Get five integer numbers from the keyboard and check whether these numbers are prime.
5. Repeat problem 4 for computing greatest common divisor (GCD) and least common multiple (LCM) for five integers entered from keyboard. (You should not use the concept of array)
6. You are required to convert your marks evaluated out of 100 to the corresponding grades, as used in MNNIT Allahabad, with the use of if-else control statement only.
7. Repeat the problem 6 with the use of switch control statement.
8. There are two monkeys whose states are one of two available (smiling and not smiling). The monkeys will be dangerous in either both are smiling or not. Compute the dangerous status of monkeys.
9. WAP to check whether a number is palindrome or not
10. WAP to find GCD of two numbers
11. WAP to search a number from a sorted array using binary search
12. WAP to implement quick sort
13. WAP to display prime numbers between two intervals
14. WAP to check whether a number can be expressed as sum of two prime numbers
15. WAP to display prime numbers between intervals using method
16. WAP to check whether a number is Armstrong number or not
17. WAP to display factors of a number
18. WAP to count number of digits in an integer

Note: Programming questions may be added, removed, or modified as per requirement