Java Assignment One (Topics: Datatype, Loop, Conditions, OOP basics)

(Create separate package for each question – try to give a name. Push the code to repository)

1. Write a program that will print the total count of the odd and even numbers between two inputted integer and print all the even numbers. (5)

Details: Take input at console.
Input 1: Starting number:
Input 2: Last Number:

Output: The count of the odd and even numbers. The even numbers between the two inputted numbers.
Hints: Do necessary checks for the inputted numbers and provide relevant message if needed. Numbers only can be positive.

Sample:
Enter Starting number: 10
Enter Ending number: 14

Output:
Total even number count: 3
Total odd number count: 2
The even numbers between 10 and 14 are: 10, 12, 14

2. Write a program that will print the following pattern? (5)

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3. Write few classes with multiple constructor, static and no static blocks. Add member variables and class level variables. Assign values to those variables using different mechanisms. Print values from the classes. (5)

4. Write a command line calculator program that will perform : addition, subtraction, multiplication and division. (15)

Sample input and output :

Input first number: 12
Input Operator: +
Input second number: 2

Output: The result is 12 + 2 = 14

Details: Any number (positive, negative, fraction) can be inputted. The operations are fixed to mentioned operations.

Hints: Good to have a Application Runner class. Use of an abstract class and child classes. Use of abstract method and implementations. Use of switch case statement. Use proper access modifiers where applicable.