************Java Language Basics - Practice Exercise 1************

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1. Write a program which accepts a number as input and check whether the given number is palindrome or not If it is a palindrome then
a. Add all the even numbers and check whether the sum is more than 25.
b. Print success and failure messages for all 3 conditions
Input : 2468642

Output : 2468642 is palindrome and the sum of even numbers is greater than 25

Input: 12345

Output: 12345 is not palindrome

Input: 12345654321

Output : 12345654321 is palindrome and sum of even numbers is less than 25
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2. Write a program which accepts an integer number as input from the user and perform the following conditional checks:
a. Print Tom if number is odd and exists between 20 to 30
b. Print Jerry, if number is even and exists between 20 and 30
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3. Create a program that accepts a word as input and checks for each single character letter in the word whether it is a consonant or vowel.
Condition:
   a. Print an error message if the input is not a letter
   b. If the input having more than one letter, print the required output
     (Vowel or Consonant) for each letter

Input : p
Output : Consonant

Input : ap
Output : Vowel Consonant (should it be a - vowel, p - consonant)
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4. Write a program using a loop to print the following output. 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5 6 6 6 6 6 6 . . . nth iteration.
 Input: 5
 Output : 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5

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5. Write a program that reads an unspecified number of integer arguments using Scanner Class and adds them together. The program should display total of the given input number and should only consider integer value.The program should display an error message if there are any non integer values
Input : 12 23 2 4
Output : 41

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6. Write a program that takes a character from the user as input and determines whether the character entered is a capital letter, a small case letter, a digit or a special symbol and display appropriately.
Input: A
Output: Capital letter

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7. Write a program which accepts a number as input from user and perform the following:
a. sort the number in non-increasing order
b. after sorting sum all the even numbers, the sum should be greater than 15 .
c. if sum is more than 15,then print output as true or false.

Input : 234534
Output : Sorted number in non-increasing order : 544332
         Sum of even numbers : 10
         False

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8. Write a program which accepts a number from user as input (set the limit say 1 - 50 or 1 - 100) User should guess until the the target number is guessed correctly.
Print separate messages for the following:
   a. Number guessed is more than original number
   b. Number guessed is less than original number
   c. Number guessed matches the original number

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9. Write a program to reverse any string without using String Buffer.
Input : london
Output : nodnol

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10. Write a program for the following condition:
Given 2 inputs , where input1 is string and input 2 is integer value, the last n characters should repeat n number of times in the output String.

Input1:   Stackroute

Input2:   5

Output1:   Stackrouterouterouterouterouteroute

Input1:   Stackroute

Input2:   2

Output1:   Stackroutetete