

Lab Assignment 6  
Due Tuesday January 5<sup>th</sup> , 2010

### **Program 14 :-**

Write a program that uses *while* loops to perform the following steps :-

- a) Prompt the user to input 2 positive integer numbers , first number and second number. Note that the first number must be smaller than the second number.
- b) Output all the even numbers between the first number and the second number.
- c) Output all the odd numbers between the first number and the second number.
- d) Output the sum of all even numbers between the first number and the second number.
- e) Output the sum of the squares all odd numbers between the first number and the second number.

### **Program 15:**

Factorials are used frequently in probability problems. The factorial of a positive integer  $n$  ( written  $n!$  and pronounced  $n$  factorial ) is equal the product of the positive integer from 1 to  $n$ . Write a java program that evaluates the factorial for any number between 1 and 15. use the following format :-

Enter a Positive integer between 1 and 10

5

The Factorial of 5 is 120.

### **Program 16:**

Write an application that play a “ guess number “ as follows :- your program chooses a number to be guessed by selecting a random integer between 1 and 1000. the application display the prompt Guess number between 1 and 100. The player inputs the first guess. If the player’s guess is incorrect, your program should display your guess is too high , try again. Or your guess is too low, try again. The program should prompt the player for the next guess. When the player enters the correct answer , your program should display ***Congratulations, You guessed the correct number.*** Allow the user to play again until he/she says N or n or No.



**Program 17:**

Write a java program that prints the following pattern. You must use for loops .

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