# BRAC University Department of Computer Science and Engineering CSE 110/162 (Programming Language I) Lab 1

# Note to Instructor: Do not discuss/use loops for any of these problems

### Task 1

Draw the flowchart of a program that reads one number from the user, and prints it back to show which number was entered by the user.

## Task 2

Draw the flowchart of a program that reads two numbers from the user, and prints their sum, product and result of subtracting 2<sup>nd</sup> number from 1<sup>st</sup> number. For example, if user gives 5 and 7 (sequentially), the program should print 12, 35 and -2.

# Task 3

Draw the flowchart of a program that reads the radius of a circle and prints its circumference and area.

### Task 4

Draw the flowchart of a program that reads two numbers from the user and prints "first" if the first number is greater than the second number.

### Task 5

Draw the flowchart of a program that reads two numbers from the user. Your program should then print "first is greater" if the first number is greater, and "first is not greater" otherwise.

# Task 6

Draw the flowchart of a program that reads two numbers from the user. Your program should then print "first is greater" if the first number is greater, "second is greater" if the second number is greater, and "the numbers are equal" otherwise.

# Task 7

Draw the flowchart of a program that reads two numbers, and prints the absolute difference. (Hint: subtract the smaller number from the larger one).

# Task 8

Draw the flowchart of a program that reads a number, and prints "The number is even" or "The number is odd", depending on whether the number is even or odd. (Hint: use the modulus operator)

### Task 9

Draw the flowchart of a program that prints the first ten positive whole numbers. [Do NOT use loops]

# Task 10

Draw the flowchart of a program that prints the first ten even positive whole numbers. (Do NOT use loop or modulus operator for this problem).

# Task 11

Draw the flowchart of a program that reads five numbers from the user, and prints their average. [Do NOT use loops]

# Task 12

Draw the flowchart of a program that finds the sum of the first 100 positive numbers. Verify your answer by calculating this sum manually. [Do NOT use loops, use the mathematical formula for calculating sum of arithmetic series]

# Task 13

Draw the flowchart of a program that reads five numbers as input from the user, and prints whether the numbers are odd or even. [Do NOT use loops]