Sinai University

Faculty of Information Technology

Programming (1) **sheet #4**

1) Write a program to read n integers and compute the sum and average.
2) Write a program to read n integers and count the even numbers
3) Write a program to read an integer x and print its factors. For example if the user entered 20 the program should print 1,2,4,5,10,20
4) Write a program to read some integers until the user entered 9999 and count the number of entered numbers
5) Write a program to read an integer n and compute the factorial. Note that the factorial of n=n*(n-1)*(n-2).....1
6) Write a program to read an integer x and determine whether x is prime or not
7) Write a program to read two integers (x and y) and print all numbers between those numbers
8) Write a program to print the following

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9) Write a program to print the following

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     ******
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10) Write a program to print the following

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*******
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11) Write a program to read an integer x and sum its digits. For example if the user entered 135 the program should print 9.
12) Write a program to print the multiplication table
13) Write a program to read n integers and compute the maximum
14) Write a program to read n integers . For each integer print its factors
15) Write a program to read an integer n and count the number of primes numbers less than or equal n
16) For a float x, write a program to compute the following

$$x + \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^4}{4} \dots \dots \frac{x^n}{n}$$

17) For a float x, write a program to compute the n terms of the following series

$$x + \frac{x^3}{3} + \frac{x^5}{5} + \frac{x^7}{7} \dots \dots$$

18) Write a program to compute the following

$$\frac{1}{30}+\frac{2}{29}+\frac{3}{28}+\frac{4}{27}+\cdots..\frac{30}{1}$$

19) Write a program to compute the following

$$\frac{1}{2}+\frac{2}{3}+\frac{3}{4}+\frac{4}{5}+\cdots..\frac{99}{100}$$