Name, Surname   :
Number   :
Course Code   :
Course Name   : Computer Programming II
Exam   :   ○ Quiz   ● Midterm   ○ Final
Date   :16.11.2014

Question Number	1	2	3	4	5	6	Total
Mark							

Note: Exam duration is 60 minutes only. Please make sure to write your name and student number on the paper that you have used

Questions

1-(20p)(Body Mass Index Calculator) The formulas for calculating BMI are

$$BMI = \frac{weightInKilograms}{heightInMeters \times heightInMeters}$$

Create a BMI calculator application that reads the user's weight in kilograms and height in meters, then calculates and displays the user's body mass index. Also, the application should display the following information from the Department of Health and Human Services/National Institutes of Health so the user can evaluate his/her BMI:
BMI VALUES
Underweight: less than 18.5
Normal: between 18.5 and 24.9
Overweight: between 25 and 29.9
Obese: 30 or greater

2-(30p)(Prime Numbers) An integer is said to be prime if it's divisible by only 1 and itself. For example, 2, 3, 5 and 7 are prime, but 4, 6, 8 and 9 are not. *Write a function* that determines if a **number is prime.**

3-(20p) (Square of Asterisks) **Write a function** that displays a solid square of asterisks whose side is specified in integer parameter side.
For example, if side is 4, the function displays:
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****
****
****
****
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4-(20p) Write a program that evaluates the factorials of the integers from keyboard

5-(20p) Draw the flowchart of factorial

6-(20p) **Write a program** that reads an integer and determines and prints whether it is odd or even.
[**Hint**: Use the remainder operator. An even number is a multiple of two. Any multiple of two leaves a remainder of zero when divided by 2]

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