

Name, Surname :
 Number :
 Course Code : EEN261
 Course Name : Computer Programming II
 Exam : Midterm Make-up Final
 Date : 05.01.2016



Please make sure to write your name and student number on each paper that you have used

Question Number	1(30p)	2(10p)	3(20p)	4(30p)	5(40p)	Total
Mark						

Note:

- 1-Exam duration is **70 minutes** only. 2- You cant take any other paper. Please use your paper efficiently!
- 3-**You are not permitted to carry your mobile phone into the exam venue even if it is switched off.!!!!**

Questions

<p>1-(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. <u>Write a function</u> that determines the number is prime or not. if the number is prime returns 1 otherwise return 0. <u>The function take one integer number as a parameter and return a integer value.</u></p> <p>2(10p) <u>Write a program</u> that calculates and prints the sum of the even integers from x to y. x and y are entered by keyboard. Assume that x is less than y.</p> <p>3-(20p) <u>Write a function</u> integerPower(base, exponent) that returns the value of $base^{exponent}$ For example, integerPower(3, 4) calculates $3 * 3 * 3 * 3$. and returns 81 Assume that exponent is a positive, nonzero integer, and base is an integer. Function integerPower should use for to control the calculation. <u>Do not use any math library functions.</u></p>	<p>4(30p)- Write a program which has a float array. And the size of array is 20. a-Read all values of array from keyboard(5p). b-Find the maximum value of in the array(20p) c-Write maximum value on the screen(5p)</p> <p>5(40p)What does the following program output and Explain the output coming from where? (Only Output even it is correct) <u>or</u> (only explanation even it is correct) <u>or</u> (wrong Explanation with correct answer) is zero point!</p> <pre>#include <stdio.h> //Prototypes void sp1(int a, int b); void sp2(int a[], int b[]); void sp3(int *a, int *b); int main(){ int a[2] = {3, 4}; int b[2] = {1, 5}; sp1(a[0], a[1]); sp2(a, b); sp3(&b[0], &b[1]); printf("%d, %d, %d, %d \n", a[0], a[1], b[0], b[1]); return 0;} //functions void sp1(int a, int b){ int temp = a; a = b; b = temp;} void sp2(int a[], int b[]){ int temp = a[0]; a[0] = b[0]; b[0] = temp;} void sp3(int *a, int *b){ int temp = *a; *a = *b; *b = temp;}</pre>
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