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| No. of Pages | 2 |
| No. of Questions | 2 |
| Total Marks | 22 |
| **Time**: 50 minutes | |

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**Department of Computer Science and Engineering**

**MIDTERM EXAMINATION Summer 2018**

**CSE 110: Programming Language I**

**CSE 161: Computer Programming**

* Write intial (AAR/ABD/AHR/DIP/DSH/MSN/NSM) of theory teacher and

section on top of the answer script

* Answer all questions. Use **back part** of the the answer script for rough work.
* Answer Question 1 at the **beginning part** of answer script.
* Write answer of Question 2 **on the question paper**.
* Figure in bracket [] next to each question indicates marks for that question.
* At the end of exam, put **question paper** inside answer script and **return both**.
* Understanding the question is part of the exam, please do not ask questions. **No washroom breaks.**

Section: \_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name in CAPITAL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Names/initials of Lab Teachers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lab Room Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab Day and Time\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 1 [10 Points]**

**[Answer on the answer-script]**

Draw the flowchart of a program that asks the user for the value of **n** as input

and then prints first n terms of the following series using a loop.

8192, 8192, **-**8192, 8192, 8192, **-**8192, 8192, . . . . . . . . . . up **n**th term

**Examples:**

If user gives n=2, print 8192, 8192

If user gives n=3, print 8192, 8192, **-**8192

If user gives n=4, print 8192, 8192, **-**8192, 8192

**Question 2 [12Points]**[answer on question paper]

|  |
| --- |
| **public class Q2A {** |
| **public static void main(String[] args) {** |
| **int a=48,b=18,d=0;** |
| **while (a%2==0 && b%2==0) {** |
| **System.out.println(a);** |
| **b /= 2;** |
| **++d;** |
| **}** |
| **while (a!=b) {** |
| **if (a%2==0) {** |
| **a /= 2;** |
| **} else if (b%2==0) {** |
| **b /= 2;** |
| **} else if (a > b) {** |
| **a = (a - b)/2;** |
| **} else {** |
| **b = (b - a)/2;** |
| **}** |
| **System.out.println(a);** |
| **System.out.println(b);** |
| **}** |
| **System.out.println(a+b+d);** |
| **}** |
| **}** |

**Show output of the above program:**

[Answer on the question paper. **There are NO errors / mistakes in this question. The question is correct.**]

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