## Home Assignment 1 (Pseudocode/Step/Flow Chart) Introduction to Computer Systems (Section: B, N, O)

Write all of the answers (pseudocode/step and flow chart) in the script (handwritten). Then use scanning software (<u>Camscanner</u>, etc.) to scan your scripts and make a PDF file. Upload that PDF file to eLMS.

Make sure to practice by merging questions also, such as you might get a question that has a similar pattern like the combination of question 4 and question 7.

Example: Calculate the multiplication of three numbers and check whether the output is an odd or an even number.

- 1. Print "Hello World." on-screen.
- 2. Calculate the average of two numbers.
- 3. Calculate the average of five numbers.
- 4. Calculate the multiplication of three numbers.
- 5. Calculate the division of two numbers.
- 6. Calculate the subtraction of two numbers.
- 7. Input a number and check if it is an odd or even number.
- 8. Input a number and check if it is divisible by 3.
- 9. Input a number and check if it is divisible by 5.
- 10. Input a number and check if it is divisible by 17.
- 11. Input a number and check if it is divisible by 2.
- 12. Input a year and check if it is a "Leap Year" or not.
- 13. Find the largest number among three numbers.
- 14. Find the largest number among two numbers.
- 15. Find the smallest number among three numbers.
- 16. Find the smallest number among two numbers.
- 17. Find the area of a rectangle.
- 18. Find the area of a triangle.

- 19. Find the area of a circle.
- 20. Find the area of a square.
- 21. The width and length of a rectangular garden are 20 meters and 15 meters, respectively. There is a road of width 2 meters around the outside boundary of the garden. What will be the area of the path around the boundary of the garden?
- 22. The width and length of a rectangular garden are 20 meters and 15 meters, respectively. There is a circular spot inside the garden having a radius of 3.5 meters. What will be the area of the path around the circular path (outside of the circular path but inside of the garden) of the garden?
- 23. Step-by-step process to make a cup of tea.
- 24. Step-by-Step process to reach your university from your home.
- 25. Divide the age bracket flowchart (in the slide).
- 26. Other problems are available in the slide, and we learned in the classes.