You may be asked to demonstrate/explain your work to the tutor, if you are absent/unavailable or fail to demonstrate properly, zero marks will be awarded.

Text book: Deitel, H M & Deitel, P J 2013, C: How to program, 7th edn, Pearson Prentice-Hall, Upper Saddle River, New Jersey.

Marks will be deducted (-0.25) if the submission format is not right
Submission Format: Copy and paste the question and then write your answer. If it is a programming question copy and paste your code from text editor followed by the screenshots of the output window. Marks will be deducted if this format is not followed. You need to follow the exact sequential number as in the tut sheet. Submit a single file.

Lab 7

1. Using an integer array that contains minimum six elements, explain the logic of the following sorting techniques. Use diagrams wherever necessary

    a. Bubble sort
    b. Selection sort
    c. Insertion sort
    d. Merge sort
    e. Quick sort

2.
```
struct student {
    char name[10];
    int rank;
};
```

    Using the student structure given above, create an array of size 5 students. Then write a complete C program to sort the students array based on the students rank. Use the following sorting techniques in your code.
    Don't forget to print initial array and final (sorted) array.
    a. Bubble sort
    b. Selection sort

3. **struct veg {**

    char item[10];
    int price;
    };

    Using the veg structure given above, create an array of size 5. Then write a complete C program to sort the array based on the item's price. Use the following sorting techniques in your code.
    Don't forget to print initial array and final (sorted) array.
    a. Insertion sort
    b. Merge sort
    c. Quick sort