Java Lab 9

Intake: 49

1. Write a program to insert 100 to a Linked List. Now start a loop from 1 to 10. If the iteration number is odd add the number to top of the list. And if the iteration number is even, add the number to bottom of the list. Read the list from top to bottom and output the list. [Hint: Output - 9 7 5 3 1 100 2 4 6 8]

2. Define a class named "Room" with variables "height", "width", and "length". Add all necessary getter setter methods to initialize & display variables.

    - Now make five rooms using input mechanism and add them to an ArrayList. Read them one by one and show them into output.
    - Now make five rooms using input mechanism and add them to a Vector. Read them one by one and show them into output.
    - Now make five rooms using input mechanism and push them to a Stack. Pop them one by one and show them into output.
    - Now make five rooms using input mechanism and add them to a PriorityQueue. Remove them one by one and show them into output.

3. Write a program to insert 5 Mango object in a Queue. Now take user input for a variable named "option". If option is 1 then insert another mango. If option is 2 delete the top mango from the Queue. If option is 3 just output the top mango. Use proper Queue methods.

4. Create a class named Student which has the property named ID(integer), Name(string), cgpa(double) etc. The value of ID, name and cgpa will be initialized when we create an object of that class. Make 5 object of Student class and add them into a Vector. Those students whose cgpa is over 3.5 will be shown in output. Complete the following Program.