**Assignment-1**

**Course: Data Structure and Algorithm(CSE225)**

**Submission Date: 22/07/17**

1. Write an algorithm to remove consecutive duplicate entries from a given linked list.
2. Write an Insertion Sort algorithm for integer key values. However, here’s the catch: The input is a stack (not an array), and the only variables that your algorithm may use are a fixed number of integers and a fixed number of stacks. The algorithm should return a stack containing the records in sorted order (with the least value being at the top of the stack). Your algorithm should be Θ(n2 ) in the worst case.
3. Complete the class with all function definitions for a circular queue  
   class queue  
   {  
    int data[10];  
    int front, rear;  
   public :  
    queue(){front=-1;rear=-1}  
    void add();  
    void remove();  
   }
4. Write a function in C++ to perform a DELETE operation in a dynamically allocated queue considering the following description :  
     
   struct Node  
   {  
    float U,V;  
    Node \*Link;  
   };  
   class QUEUE  
   {  
    Node \*Rear,\*Front;  
   public:  
    QUEUE(){Rear=NULL; Front=NULL;}  
    void INSERT();  
    void DELETE();  
    ~QUEUE();  
   };