1. The remove is O(1) because there is no loop it is simply changing the pointer to the next value and returning the previous one.

```
public int remove(){
            int data = first.data;
            first = first.next;
            size--;
            return data;
        }

public int getValue(int index){
            int data = 0;

            if (index > size){
                return -1;
            }
            else{
                for(int i = 0;i<=index;i++){
                    data = first.data;
                    first = first.next;
                    }
                add(data);
                return data;
            }
            }
        }
    }
```

The getvalue is O(1) too because it is simply changing the pointer of the head to the index that is given.

2. Add() is O(n) because first it creates a pointer then creates space to take in data, once it takes in data it sets the pointer to the next value in the stack or to itself if the stack was empty.

```
public void add(int data){
            Node head = first;
            first = new Node();
            first.data = data;
            first.next = head;
            size++;
        }
```