

[HW#6] 자료구조론 실습

Stack

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```
public Stack(){  
    this.top = null;  
}
```

```
public void push(String data){  
    Node newNode = new Node(data);  
    newNode.nextNode = top;  
    top = newNode;  
}
```

```
public String pop(){  
    if(!empty()){  
        Node returnNode = top;  
        top = top.nextNode;  
        return returnNode.data;  
    }  
    else return null;  
}
```

```
public boolean empty(){
    return top == null;
}
```

```
public void printStack(){
    if(empty()) System.out.println("비어있음");
    else{
        Node curNode = top;
        while(curNode != null){
            System.out.print(curNode.data+" ");
            curNode = curNode.nextNode;
        }
        System.out.println();
    }
}
```

```
class Run{
    public static void main(String[] args) {
        Stack st1 = new Stack();
        st1.pop();
        st1.printStack();
        // 2의 배수로 5개 push
        for(int i = 0; i < 5; i++){
            st1.push(String.valueOf((i+1)*2));
        }

        st1.printStack();

        // 3개 pop, push('1')
        for(int i = 0; i < 3; i++){
            System.out.println(st1.pop());
        }

        st1.push("1");

        st1.printStack();
    }
}
```

```
Appleui-MacBook-Air-4:day7 nayunhwan$ java Run
비어있음
10 8 6 4 2
10
8
6
1 4 2
Appleui-MacBook-Air-4:day7 nayunhwan$
```