**public** **class** Main {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

System.***out***.println("20145165 정균모");

LinkedList L = **new** LinkedList();

LinkedList P = **new** LinkedList();

L.addLastNode("꼴뚜기");

L.addLastNode("도다리");

L.addLastNode("오징어");

L.addLastNode("광어");

L.addFirstNode("고등어");

L.printList();

L.insertNode(L.searchNode("오징어"),"옥돔" );

L.printList();

L.deleteLastNode();

L.printList();

L.reverse();

L.printList();

L.insertNode(L.searchNode("꼴뚜기"), "삼치");

L.printList();

L.deleteNext(L.searchNode("꼴뚜기"));

L.printList();

P.addLastNode("미역");

P.addLastNode("귤");

P.addLastNode("따개비");

L.addList(P);

L.printList();

}

}

////

**public** **class** LinkedList {

ListNode head;

**public** **void** addFirstNode(String x) {

ListNode Ln = **new** ListNode();

Ln.data=x;

Ln.link=head;

head = Ln;

}

**public** **void** insertNode(ListNode p, String x){

ListNode Ln = **new** ListNode();

Ln.data=x;

**if**(head == **null**){

head = Ln;

head.link = **null**;

}**else** **if**(p == **null**){

Ln.link =head;

head = Ln;

}**else**{

Ln.link=p.link;

p.link=Ln;

}

}

**public** **void** addLastNode(String x) {

ListNode p = **new** ListNode();

ListNode Ln = **new** ListNode();

Ln.data = x;

Ln.link = **null**;

**if**(head == **null**) {

head = Ln;

**return**;

}**else**{

p=head;

**while**(!(p.link==**null**)){

p = p.link;

}

}

p.link = Ln;

}

**public** **void** deleteNext(ListNode p) {

ListNode q = **new** ListNode();

**if** (head == **null**) {

System.***out***.println("error");

}

**if** (p == **null**) {

q = head;

head = head.link;

} **else** {

q = p.link;

**if**(q==**null**){

System.***out***.println("삭제 값이 없습니다.");

}p.link = q.link;

}

}

**public** **void** reverse(){

ListNode p,q,r;

p = head;

q = **null**;

**while**(!(p==**null**)){

r=q;

q=p;

p=p.link;

q.link=r;

}

head=q;

}

**public** LinkedList addList(LinkedList list){

ListNode p;

**if**(head==**null**){

**return** list;

}**else** **if**(list==**null**){

**return** **this**;

}**else**{

p=head;

**while**(!(p.link==**null**)){

p=p.link;

}

p.link=list.head;

**return** **this**;

}

}

**public** ListNode searchNode(String x){

ListNode p;

p=head;

**while**(!(p==**null**)){

**if**(p.data == x){

**return** p;

}p=p.link;

}

**return** p;

}

**public** **void** deleteLastNode(){

ListNode p,c;

**if**(head == **null**){

**return**;

}**else** **if**(head.link==**null**){

head=**null**;

}**else**{

p=head;

c=head.link;

**while**(c.link!=**null**){

p=c;

c=c.link;

}

p.link=**null**;

}

}

**public** **void** printList(){

ListNode p;

System.***out***.print("(");

p = head;

**while**(p != **null**){

System.***out***.print(p.data);

p=p.link;

**if**(p != **null**){

System.***out***.print(",");

}

}

System.***out***.println(")");

}

}

/////

**public** **class** ListNode {

String data;

ListNode link;

}

