**package** com;

**import** java.util.\*;

**public** **class** doubly {

**static** Node *head*;

**static** **class** Node{

**int** data;

Node next;

Node prev;

};

**static** **void** addNode(**int** value) {

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

Node new\_node = **new** Node();

new\_node.data = value;

new\_node.next = new\_node.prev = new\_node;

*head* = new\_node;

**return**;

}

Node last = (*head*).prev;

Node new\_node = **new** Node();

new\_node.data = value;

new\_node.next = *head*;

(*head*).prev = new\_node;

new\_node.prev = last;

last.next = new\_node;

}

**static** **void** printNodes() {

Node temp = *head*;

**while** (temp.next != *head*)

{

System.***out***.printf("%d ", temp.data);

temp = temp.next;

}

System.***out***.printf("%d ", temp.data);

System.***out***.printf("\nCircular doubly linked list travesed backward: \n");

Node last = *head*.prev;

temp = last;

**while** (temp.prev != last)

{

System.***out***.printf("%d ", temp.data);

temp = temp.prev;

}

System.***out***.printf("%d ", temp.data);

}

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

{

Node l\_list = **null**;

*addNode*(40);

*addNode*(10);

*addNode*(650);

System.***out***.printf("Circular doubly linked list: ");

*printNodes*();

}

}