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BST.java | SimpleLL.java | LinkedList.java | ArrayStack.java
1  import java.util.Scanner;
2
3  class ArrayStack{
4      private int top,size;
5      private int arr[];
6      ArrayStack(int size){
7          this.size=size;
8          this.top=-1;
9          this.arr=new int[size];
10     }
11
12
13     public boolean isEmpty(){
14         return top<0;
15     }
16     void push(int val){
17         if(top==size-1){
18             System.out.println("Stack Overflow");
19             return ;
20         }
21         arr[++top]=val;
22     }
23     void pop(){
24         if(top== -1){
25             System.out.println("Stack Underflow");
26             return;
27         }
28         System.out.println(arr[top--] );
29     }
30
31     int peek(){
32         return arr[top];
33     }
34     public static void main(String args[]){
35         Scanner sc=new Scanner(System.in);
36         ArrayStack st=new ArrayStack(sc.nextInt());
37
38         while(sc.hasNext()){
39             String str=sc.next();
40
41             if(str.equalsIgnoreCase("push")){
42                 String temp=sc.next();
43                 //System.out.println(temp);
44                 int val=Integer.parseInt(temp);
45                 st.push(val);
46             }
47             else if(str.equalsIgnoreCase("pop")){
48                 //System.out.println(temp);
49             }
50         }
51     }
52
53     }
54
55     }
56
```

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BST.java | SimpleLL.java | LinkedList.java | ArrayStack.java
9      this.arr=new int[size];
10
11  }
12
13  public boolean isEmpty(){
14      return top<0;
15  }
16  void push(int val){
17      if(top==size-1){
18          System.out.println("Stack Overflow");
19          return ;
20      }
21      arr[++top]=val;
22  }
23  void pop(){
24      if(top== -1){
25          System.out.println("Stack Underflow");
26          return;
27      }
28      System.out.println(arr[top--] );
29  }
30
31  int peek(){
32      return arr[top];
33  }
34  public static void main(String args[]){
35      Scanner sc=new Scanner(System.in);
36      ArrayStack st=new ArrayStack(sc.nextInt());
37
38      while(sc.hasNext()){
39          String str=sc.next();
40
41          if(str.equalsIgnoreCase("push")){
42              String temp=sc.next();
43              //System.out.println(temp);
44              int val=Integer.parseInt(temp);
45              st.push(val);
46          }
47          else if(str.equalsIgnoreCase("pop")){
48              //System.out.println(temp);
49              st.pop();
50          }
51          else if(str.equalsIgnoreCase("Exit")) break;
52      }
53      sc.close();
54  }
55
56
```

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New Tab Full Screen Java Font size Theme Word Wrap Shortcut
BST.java SimpleLL.java
110 if(temp==null){
111     return;
112 }
113 if(temp.next==null) return;
114 temp.next=temp.next.next;
115
116
117
118 }
119 public static void main(String args[]){
120     Scanner sc=new Scanner(System.in);
121
122     while(sc.hasNext()){
123         String str=sc.next();
124         if(str.equals("AB")){
125             int val=sc.nextInt();
126             addFront(val);
127         }
128         else if(str.equals("PR")){
129             print();
130         }
131         else if(str.equals("AE")){
132             int val=sc.nextInt();
133             addEnd(val);
134         }
135         else if(str.equals("AWB")){
136             int key=sc.nextInt();
137             int val=sc.nextInt();
138             //System.out.println(key+" "+val);
139             addWAfter(key,val);
140         }
141         else if(str.equals("AWB")){
142             int key=sc.nextInt();
143             int val=sc.nextInt();
144             //System.out.println(key+" "+val);
145             addWBefore(key,val);
146         }
147         else if(str.equals("DM")){
148             int val=sc.nextInt();
149             delete(val);
150         }
151         else if(str.equals("DMA")){
152             int val=sc.nextInt();
153             deleteAfter(val);
154         }
155     }
156 }
```

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New Tab Full Screen Java Font size Theme Word Wrap Shortcut
BST.java SimpleLL.java
82 }
83 //PR
84 static void delete(int data){
85     if(head.data==data){
86         Node temp=head.next;
87         head=temp;
88         return;
89     }
90     Node temp=head;
91     while(temp!=null){
92         if(temp.next.data==data) break;
93         temp=temp.next;
94     }
95     if(temp==null){
96         return;
97     }
98     temp.next=temp.next.next;
99
100
101
102 }
103 //DMA
104 static void deleteAfter(int data){
105     Node temp=head;
106     while(temp!=null){
107         if(temp.data==data) break;
108         temp=temp.next;
109     }
110     if(temp==null){
111         return;
112     }
113     if(temp.next==null) return;
114     temp.next=temp.next.next;
115
116
117
118 }
119 public static void main(String args[]){
120     Scanner sc=new Scanner(System.in);
121
122     while(sc.hasNext()){
123         String str=sc.next();
124         if(str.equals("AB")){
125             int val=sc.nextInt();
126             addFront(val);
127         }
128     }
129 }
```

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BST.java SimpleLL.java
42 Node temp=head;
43 while(temp.next!=null){
44     temp=temp.next;
45 }
46 temp.next=newN;
47 }
48 //ANS
49 static void addAfter(int key,int data){
50     Node newN=new Node(data);
51     //System.out.println(key+" "+data);
52     Node temp=head;
53     while(temp!=null){
54         if(temp.data==key)break;
55         temp=temp.next;
56     }
57     if(temp==null){
58         return;
59     }
60     newN.next=temp.next;
61     temp.next=newN;
62 }
63 //ANS
64 static void addBefore(int key, int data){
65     Node newN=new Node(data);
66     Node temp=head;
67     while(temp!=null){
68         if(temp.next.data==key)break;
69         temp=temp.next;
70     }
71     if(temp==null){
72         return;
73     }
74     newN.next=temp.next;
75     temp.next=newN;
76 }
77 //DN
78 static void delete(int data){
79     if(head.data==data){
80         head=head.next;
81     }
82 }
83 }
84 }
85 }
86 }
87 }
```

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New Tab Full Screen Java Font size Theme Word Wrap Shortcut

BST.java SimpleLL.java
1 import java.util.Scanner;
2
3 class SimpleLL{
4     static Node head;
5
6     static class Node{
7         int data;
8         Node prev;
9         Node next;
10        Node(int data){
11            this.data=data;
12            this.next=null;
13        }
14    }
15
16    static void addFront(int data){
17        Node newN=new Node(data);
18        if(head==null){
19            head=newN;
20            return;
21        }
22        newN.next=head;
23        head=newN;
24    }
25
26    static void print(){
27        Node temp=head;
28        while(temp!=null){
29            System.out.print(temp.data+" ");
30            temp=temp.next;
31        }
32        System.out.println();
33    }
34 }
35 //Ans
36 static void addEnd(int data){
37     Node newN=new Node(data);
38     if(head==null){
39         head=newN;
40         return;
41     }
42     Node temp=head;
43     while(temp.next!=null){
44         temp=temp.next;
45     }
46     temp.next=newN;
47 }
```

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1 import java.util.Scanner;
2
3 class BST{
4     //static Node root;
5     //static String route="";
6     static class Node{
7         int data;
8         Node left;
9         Node right;
10        Node(int data){
11            this.data=data;
12            this.left=null;
13            this.right=null;
14        }
15    }
16    static Node insert(Node root,int data){
17        Node newN=new Node(data);
18        if(root==null){
19            return newN;
20        }
21        if(root.data==data){
22            return root;
23        }
24        if(data<root.data){
25            root.left=insert(root.left,data);
26        }
27        else{
28            root.right=insert(root.right,data);
29        }
30        return root;
31    }
32    static void search(Node temp,int data,String route){
33        if(temp==null){
34            System.out.println("Not Found");
35            return;
36        }
37        if(data==temp.data){
38            System.out.println("Root" + route);
39            route="";
40            return;
41        }
42        if(data<temp.data){
43            route+=" L";
44            search(temp.left,data,route);
45        }
46        else{
47            route+=" R";
48            search(temp.right,data,route);
49        }
50    }
51    public static void main(String args[]){
52        Scanner sc=new Scanner(System.in);
53        Node root=null;
54        while(sc.hasNext()){
55            int n=sc.nextInt();
56            if(n==0) break;
57            root=insert(root,n);
58        }
59        int t=sc.nextInt();
60        while(t>0){
61            int n=sc.nextInt();
62            //System.out.println(n);
63            String route="";
64            search(root,n,route);
65            --t;
66        }
67    }
68 }
```

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30
31
32     return root;
33 }
34 static void search(Node temp,int data,String route){
35     if(temp==null){
36         System.out.println("Not Found");
37         return;
38     }
39     if(data==temp.data){
40         System.out.println("Root" + route);
41         route="";
42         return;
43     }
44     if(data<temp.data){
45         route+=" L";
46         search(temp.left,data,route);
47     }
48     else{
49         route+=" R";
50         search(temp.right,data,route);
51     }
52 }
53
54 }
55
56 public static void main(String args[]){
57     Scanner sc=new Scanner(System.in);
58     Node root=null;
59     while(sc.hasNext()){
60         int n=sc.nextInt();
61         if(n==0) break;
62         root=insert(root,n);
63     }
64     int t=sc.nextInt();
65     while(t>0){
66         int n=sc.nextInt();
67         //System.out.println(n);
68         String route="";
69         search(root,n,route);
70         --t;
71     }
72 }
73
74 }
75 }
```

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New Tab Full Screen Java Font size Theme Word Wrap Shortcut

Untitled Bracket.java Untitled ArrayStack.java CQueue.java

```
1 import java.util.Scanner;
2 class CQueue{
3     int arr[];
4     int size,front,rear;
5     CQueue(int n){
6         this.arr=new int[n];
7         this.size=n;
8         this.front=this.rear=-1;
9     }
10
11     boolean isEmpty(){
12         return (front== -1);
13     }
14     boolean isFull(){
15         return ((rear+1)%size==front);
16     }
17     public void deque(){
18         if(isEmpty()){
19             System.out.println("EMPTY");
20             return;
21         }
22         int val=arr[front];
23         if(front==rear){
24             front=-1;
25             rear=-1;
26         }
27         else{
28             front=(front+1)%size;
29         }
30         System.out.println(val);
31     }
32     public void enqueue(int val){
33         if(isFull()){
34             System.out.println("FULL");
35             return;
36         }
37         if(front== -1){
38             front=0;
39         }
40         rear=(rear+1)%size;
41         arr[rear]=val;
42     }
43
44     public static void main(String args[]){
45         Scanner sc=new Scanner(System.in);
46         CQueue q=new CQueue(sc.nextInt());
```

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```
16 }
17     public void deque(){
18         if(isEmpty()){
19             System.out.println("EMPTY");
20             return;
21         }
22         int val=arr[front];
23         if(front==rear){
24             front=-1;
25             rear=-1;
26         }
27         else{
28             front=(front+1)%size;
29         }
30         System.out.println(val);
31     }
32     public void enqueue(int val){
33         if(isFull()){
34             System.out.println("FULL");
35             return;
36         }
37         if(front== -1){
38             front=0;
39         }
40         rear=(rear+1)%size;
41         arr[rear]=val;
42     }
43
44     public static void main(String args[]){
45         Scanner sc=new Scanner(System.in);
46         CQueue q=new CQueue(sc.nextInt());
47
48         while(sc.hasNext()){
49             String t=sc.next();
50             if(t.equals("deque")){
51                 q.deque();
52             }
53             else if(t.equals("enqueue")){
54                 String temp=sc.next();
55                 int val=Integer.parseInt(temp);
56                 q.enqueue(val);
57             }
58             else{
59                 return ;
60             }
61         }
62     }
63
64 }
```

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Untitled BracketJava Untitled ArrayStack.java

```
1 import java.util.Scanner;
2
3 class ArrayStack{
4     private int top,size;
5     private int arr[];
6     ArrayStack(int size){
7         this.size=size;
8         this.top=-1;
9         this.arr=new int[size];
10    }
11
12    public boolean isEmpty(){
13        return top<0;
14    }
15
16    void push(int val){
17        if(top==size-1){
18            //System.out.println("Stack Overflow");
19            return ;
20        }
21        arr[++top]=val;
22    }
23
24    void pop(){
25        if(top<0){
26            System.out.println("Stack Underflow");
27            return;
28        }
29        System.out.println(arr[top--] );
30    }
31
32    int peek(){
33        return arr[top];
34    }
35
36    public static void main(String args[]){
37        Scanner sc=new Scanner(System.in);
38        ArrayStack st=new ArrayStack(sc.nextInt());
39
40        while(sc.hasNext()){
41            String str=sc.next();
42
43            if(str.equals("push")){
44                String temp=sc.next();
45                //System.out.println(temp);
46                int val=Integer.parseInt(temp);
47                st.push(val);
48            }
49        }
50    }
51
52 }
53
54
55
56
```

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```
17
18
19 //System.out.println("Stack Overflow");
20 return ;
21 }
22 arr[++top]=val;
23
24 void pop(){
25     if(top<0){
26         System.out.println("Stack Underflow");
27         return;
28     }
29     System.out.println(arr[top--] );
30 }
31
32 int peek(){
33     return arr[top];
34 }
35
36 public static void main(String args[]){
37     Scanner sc=new Scanner(System.in);
38     ArrayStack st=new ArrayStack(sc.nextInt());
39
40     while(sc.hasNext()){
41         String str=sc.next();
42
43         if(str.equals("push")){
44             String temp=sc.next();
45             //System.out.println(temp);
46             int val=Integer.parseInt(temp);
47             st.push(val);
48         }
49         else if(str.equals("pop")){
50             //System.out.println("pop");
51             st.pop();
52         }
53     }
54 }
55
56 }
```

Ln

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New Tab Full Screen Syntax- Font size- Theme- WordWrap Shortcut

Untitled BracketJava Untitled Untitled

1 import java.util.Scanner;
2
3 class BalancePar{
4     private int top,size;
5     private char arr[];
6     BalancePar(int size){
7         this.size=size;
8         this.top=-1;
9         this.arr=new char[size];
10    }
11
12    public boolean isEmpty(){
13        return top<0;
14    }
15    void push(char ch){
16        if(top==size-1){
17            return;
18        }
19        arr[++top]=ch;
20    }
21    int pop(){
22        if(top<0){
23            return -1;
24        }
25        top--;
26        return 1;
27    }
28
29    int peek(){
30        return arr[top];
31    }
32    public static void main(String args[]){
33        Scanner sc=new Scanner(System.in);
34        String str=sc.nextLine();
35        BalancePar st=new BalancePar(str.length());
36        boolean balanced=true;
37
38        for(int i=0;i<str.length();i++){
39            char ch=str.charAt(i);
40
41            if(ch=='{'||ch=='('||ch=='['){
42                st.push(ch);
43            }
44        }
45    }
46}
```

```
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15 void push(char ch){
16     if(top==size-1){
17         return;
18     }
19     arr[++top]=ch;
20 }
21 int pop(){
22     if(top<0){
23         return -1;
24     }
25     top--;
26     return 1;
27 }
28
29 int peek(){
30     return arr[top];
31 }
32 public static void main(String args[]){
33     Scanner sc=new Scanner(System.in);
34     String str=sc.nextLine();
35     BalancePar st=new BalancePar(str.length());
36     boolean balanced=true;
37
38     for(int i=0;i<str.length();i++){
39         char ch=str.charAt(i);
40
41         if(ch=='{'||ch=='('||ch=='['){
42             st.push(ch);
43         }
44         else{
45             if(!st.isEmpty() &&
46                ((st.peek()=='{' && ch=='}') ||
47                 (st.peek()=='(' && ch==')') ||
48                 (st.peek()=='[' && ch==']'))){
49                 st.pop();
50             }
51             else{
52                 balanced=false;
53             }
54         }
55     }
56
57     if(!st.isEmpty()){
58         balanced=false;
59     }
60 }
61
62 }
63 }
```

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24     }
25     top--;
26     return 1;
27 }
28
29 int peek(){
30     return arr[top];
31 }
32 public static void main(String args[]){
33     Scanner sc=new Scanner(System.in);
34     String str=sc.nextLine();
35     BalancePar st=new BalancePar(str.length());
36     boolean balanced=true;
37
38     for(int i=0;i<str.length();i++){
39         char ch=str.charAt(i);
40
41         if(ch=='{'||ch=='('||ch=='['){
42             st.push(ch);
43         }
44         else{
45             if(!st.isEmpty() &&
46                ((st.peek()=='{' && ch=='}') ||
47                 (st.peek()=='(' && ch==')') ||
48                 (st.peek()=='[' && ch==']'))){
49                 st.pop();
50             }
51             else{
52                 balanced=false;
53             }
54         }
55     }
56
57     if(!st.isEmpty()){
58         balanced=false;
59     }
60
61     if(balanced){
62         System.out.println("Balanced");
63     }
64     else{
65         System.out.println("Not Balanced");
66     }
67 }
68
69 }
70
71 }
72 }
```

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New Tab | Full Screen | Java | Font size | Theme | Word Wrap | Shortcut

Untitled | Bracket.java

1  import java.util.Scanner;
2
3  class Bracket{
4      private int top,size;
5      private char arr[];
6      Bracket(int size){
7          this.size=size;
8          this.top=-1;
9          this.arr=new char[size];
10     }
11
12     public boolean isEmpty(){
13         return top<0;
14     }
15     void push(char ch){
16         if(top==size-1){
17             return;
18         }
19         arr[++top]=ch;
20     }
21     int pop(){
22         if(top<0){
23             return -1;
24         }
25         top--;
26         return 1;
27     }
28
29     int peek(){
30         return arr[top];
31     }
32
33     public static void main(String args[]){
34         Scanner sc=new Scanner(System.in);
35         int val=sc.nextInt();
36         sc.nextLine();
37         for(int it=0;it<val;it++){
38             String str=sc.nextLine();
39             //System.out.println(str);
40             Bracket st=new Bracket(str.length());
41             boolean balanced=true;
42
43             for(int i=0;i<str.length();i++){
44                 char ch=str.charAt(i);
45
46                 if(ch=='{'||ch=='('||ch=='['){
47                     st.push(ch);
48                 }
49                 else{
50                     if(!st.isEmpty() &&
51                        ((st.peek()=='{' && ch=='}') ||
52                         (st.peek()=='(' && ch==')') ||
53                         (st.peek()=='[' && ch==']'))){
54                         st.pop();
55                     }
56                     else{
57                         balanced=false;
58                     }
59                 }
60             }
61
62             if(!st.isEmpty()){
63                 balanced=false;
64             }
65
66             if(balanced){
67                 System.out.println("Balanced");
68             }
69             else{
70                 System.out.println("Not Balanced");
71             }
72         }
73     }
74 }
```



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31 }
32 public static void main(String args[]){
33     Scanner sc=new Scanner(System.in);
34     int val=sc.nextInt();
35     sc.nextLine();
36     for(int it=0;it<val;it++){
37         String str=sc.nextLine();
38         //System.out.println(str);
39         Bracket st=new Bracket(str.length());
40         boolean balanced=true;
41
42
43         for(int i=0;i<str.length();i++){
44             char ch=str.charAt(i);
45
46
47             if(ch=='{'||ch=='('||ch=='['){
48                 st.push(ch);
49             }
50             else if(ch=='}'||ch==')'||ch==']'){
51                 if(st.isEmpty())&&
52                     ((st.peek()!='{'&&ch=='}')||
53                     (st.peek()!='('&&ch==')')||
54                     (st.peek()!='['&&ch==']'))){
55                     st.pop();
56                 }
57                 else{
58                     balanced=false;
59                 }
60             }
61         }
62     }
63
64     if(st.isEmpty()){
65         balanced=false;
66     }
67
68     if(balanced){
69         System.out.println("TRUE");
70     }
71     else{
72         System.out.println("FALSE");
73     }
74 }
75 }
76 }
77 }
78 }
```

```
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87     return;
88 }
89 Node temp=head;
90 while(temp!=null){
91     if(temp.next.data==data) break;
92     temp=temp.next;
93 }
94 if(temp==null){
95     return;
96 }
97 temp.next=temp.next.next;
98
99
100
101 }
102 //DRA
103 static void deleteAfter(int data){
104     Node temp=head;
105     while(temp!=null){
106         if(temp.data==data) break;
107         temp=temp.next;
108     }
109     if(temp==null){
110         return;
111     }
112     if(temp.next==null) return;
113     temp.next=temp.next.next;
114 }
115
116 }
117
118 public static void main(String args[]){
119     Scanner sc=new Scanner(System.in);
120
121     while(sc.hasNext()){
122         String str=sc.next();
123         if(str.equals("AB")){
124             int val=sc.nextInt();
125             addFront(val);
126         }
127         else if(str.equals("PR")){
128             print();
129         }
130         else if(str.equals("AE")){
131             int val=sc.nextInt();
132             addEnd(val);
133         }
134     }
```

```
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112     }
113     if(temp.next==null) return;
114
115     temp.next=temp.next.next;
116
117 }
118
119 public static void main(String args[]){
120     Scanner sc=new Scanner(System.in);
121
122     while(sc.hasNext()){
123         String str=sc.next();
124         if(str.equals("AB")){
125             int val=sc.nextInt();
126             addFront(val);
127         }
128         else if(str.equals("PR")){
129             print();
130         }
131         else if(str.equals("AE")){
132             int val=sc.nextInt();
133             addEnd(val);
134         }
135         else if(str.equals("AWA")){
136             int key=sc.nextInt();
137             int val=sc.nextInt();
138             //System.out.println(key+" "+val);
139             addAfter(key,val);
140         }
141         else if(str.equals("AWB")){
142             int key=sc.nextInt();
143             int val=sc.nextInt();
144             //System.out.println(key+" "+val);
145             addBefore(key,val);
146         }
147         else if(str.equals("DN")){
148             int val=sc.nextInt();
149             delete(val);
150         }
151         else if(str.equals("DNA")){
152             int val=sc.nextInt();
153             deleteAfter(val);
154         }
155     }
156 }
157
158 }
159 }
```

```
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LinkedList.java | SimpleLL.java | Untitled |
44     temp=temp.next;
45 }
46     temp.next=newN;
47 }
48 //AWA
49 static void addAfter(int key,int data){
50     Node newN=new Node(data);
51     //System.out.println(key+" "+data);
52     Node temp=head;
53     while(temp!=null){
54         if(temp.data==key)break;
55         temp=temp.next;
56     }
57     if(temp==null){
58         return;
59     }
60     newN.next=temp.next;
61     temp.next=newN;
62 }
63 //AWB
64 static void addBefore(int key, int data){
65     //System.out.println(key+" "+data);
66     Node newN=new Node(data);
67     Node temp=head;
68     while(temp!=null){
69         if(temp.next.data==key)break;
70         temp=temp.next;
71     }
72     if(temp==null){
73         return;
74     }
75     newN.next=temp.next;
76     temp.next=newN;
77 }
78 //DN
79 static void delete(int data){
80     if(head.data==data){
81         Node temp=head.next;
82         head=temp;
83         return;
84     }
85     Node temp=head;
86     while(temp!=null){
87         if(temp.data==data){
88             temp.next=temp.next.next;
89         }
90     }
```

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New Tab Full Screen Java Font size Theme Word Wrap Shortcut

Linkedlist.java Untitled

```
1 import java.util.Scanner;
2
3 class LinkedList{
4     static Node head;
5     static Node tail;
6
7     static class Node{
8         int data;
9         Node prev;
10        Node next;
11        Node(int data){
12            this.data=data;
13            this.next=null;
14            this.prev=null;
15        }
16    }
17    //Ab
18    static void addFront(int data){
19        Node newNode=new Node(data);
20        if(head==null){
21            head=newNode;
22            tail=newNode;
23            return;
24        }
25        newNode.next=head;
26        head.prev=newNode;
27        head=newNode;
28    }
29
30    //Pr
31    static void print(){
32        Node temp=head;
33        while(temp!=null){
34            System.out.print(temp.data+" ");
35            temp=temp.next;
36        }
37        System.out.println();
38    }
39
40    //Ar
41    static void addEnd(int data){
42        Node newNode=new Node(data);
43        if(head==null){
44            addFront(data);
45        }
46    }
```

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```
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New Tab Full Screen Java Font size Theme Word Wrap Shortcut

LinkedList.java Untitled X
44- if(head==null){
45-     addFront(data);
46-     return;
47- }
48- newN.prev=tail;
49- tail.next=newN;
50- tail=newN;
51- }
52- //ADD
53- static void addAfter(int key,int data){
54-     Node newN=new Node(data);
55-     //System.out.println(key+" "+data);
56-     Node temp=head;
57-     while(temp!=null){
58-         if(temp.data==key)break;
59-         temp=temp.next;
60-     }
61-     if(temp==null){
62-         return;
63-     }
64-     newN.prev=temp;
65-     newN.next=temp.next;
66-     temp.next=newN;
67-     if(newN.next!=null){
68-         newN.next.prev=newN;
69-     }
70- }
71- }
72- //ADD
73- static void addBefore(int key, int data){
74-     //System.out.println(key+" "+data);
75-     Node newN=new Node(data);
76-     Node temp=head;
77-     while(temp!=null){
78-         if(temp.data==key)break;
79-         temp=temp.next;
80-     }
81-     if(temp==null){
82-         return;
83-     }
84-     newN.next=temp;
85-     newN.prev=temp.prev;
86-     temp.prev=newN;
87-     if(newN.prev!=null){
88-         newN.prev.prev=newN;
89-     }
90- }
```

```
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New Tab Full Screen Java Font size Theme Word Wrap Shortcut

LinkedList.java Untitled X
87- newN.prev=temp.prev;
88- temp.prev=newN;
89- if(newN.prev!=null){
90-     newN.prev.next=newN;
91- }
92- }
93- //DEL
94- static void delete(int data){
95-     if(head.data==data){
96-         head=head.next;
97-         head.prev=null;
98-         return;
99-     }
100-     if(tail.data==data){
101-         Node temp=tail.prev;
102-         tail=temp;
103-         tail.next=null;
104-         return;
105-     }
106-     Node temp=head;
107-     while(temp!=null){
108-         if(temp.data==data) break;
109-         temp=temp.next;
110-     }
111-     if(temp==null){
112-         return;
113-     }
114-     if(temp.prev!=null){
115-         temp.prev.next=temp.next;
116-     }
117-     if(temp.next!=null){
118-         temp.next.prev=temp.prev;
119-     }
120- }
121- }
122- //DEL
123- static void deleteAfter(int data){
124-     Node temp=head;
125-     while(temp!=null){
126-         if(temp.data==data) break;
127-         temp=temp.next;
128-     }
129- }
```



```
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New Tab Full Screen Java Font size Theme WordWrap Shortcut

LinkedList.java Untitled X
190 LinkedList list = new LinkedList();
191 while(sc.hasNext()){
192     String str = sc.next();
193     if(str.equals("ADD")){
194         int val = sc.nextInt();
195         addFront(val);
196     }
197     else if(str.equals("PR")){
198         print();
199     }
200     else if(str.equals("AE")){
201         int val = sc.nextInt();
202         addEnd(val);
203     }
204     else if(str.equals("AWA")){
205         int key = sc.nextInt();
206         int val = sc.nextInt();
207         //System.out.println(key+" "+val);
208         addWAfter(key, val);
209     }
210     else if(str.equals("AWB")){
211         int key = sc.nextInt();
212         int val = sc.nextInt();
213         //System.out.println(key+" "+val);
214         addWBefore(key, val);
215     }
216     else if(str.equals("DU")){
217         int val = sc.nextInt();
218         delete(val);
219     }
220     else if(str.equals("DMA")){
221         int val = sc.nextInt();
222         deleteAfter(val);
223     }
224     else if(str.equals("DMB")){
225         int val = sc.nextInt();
226         deleteBefore(val);
227     }
228     else if(str.equals("FPR")){
229         fancyPrint();
230     }
231     else if(str.equals("RPR")){
232         reversePrint();
233     }
234 }
235 }
```