IVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO



FACULTAD DE ESTUDIOS SUPERIORES ARAGON

TAREA 3

PRESENTA

Alexis Hernández Zamudio

APROFESOR

Jesús Hernández Cabrera

Gpo:1158

URL del repositorio:

https://github.com/TyrBalder1439/Estructur a-de-Datos-



Ciudad Nezahualcóyotl, EDOMEX. 26 de agosto del 2024

```
Modo.java [-/A] × NodosMain.java [-/A] ×
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Source
1
      package com.mycompany.nodo;
2
      public class Nodo<T> {
          private T dato;
 3
          private Nodo<T> siguiente;
 4
5
          public Nodo() {
   L
6
          }
   7
          public Nodo (T dato) {
              this.dato = dato;
8
9
  public Nodo(T dato, Nodo<T> siguiente) {
10
              this.dato = dato;
11
              this.siguiente = siguiente;
12
13
  14
          public T getDato() {
              return dato;
15
16
          public void setDato(T dato) {
17
  18
              this.dato = dato;
19
20
          public Nodo<T> getSiguiente() {
21
              return siguiente;
22
23
  public void setSiguiente(Nodo<T> siguiente) {
              this.siquiente = siquiente;
24
25
          @Override
26
  public String toString() {
0
28
              return "Nodo{" +
29
                      "dato=" + dato +
                      ", siguiente=" + siguiente +
30
                      1}1;
31
32
33
      }
```

```
Start Page X Modo.java [-/A] X NodosMain.java [-/A] X
 Source History | [6] | [8] → | [7] → | [7] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → | [8] → 
  1
              package com.mycompany.nodo;
  2
  3
              public class NodosMain {
  4 -
                      public static void main(String[] args) {
  5
                                System.out.println("creando la estructura");
                                Nodo<Integer> head2 = new Nodo<>(100, new Nodo<>(200, new Nodo<>(300, new Nodo<>(400, new Nodo <>(600)))) );
   6
   7
                                Nodo<Integer> auxi = head2;
  8
                                System.out.print("|");
  9
                                while (auxi != null) {
                                       System.out.print(auxi.getDato() + "| -> |");
 10
 11
                                         auxi = auxi.getSiguiente();
 12
 13
                                System.out.print("null|\n");
 14
                                System.out.println("cambiando 300 por 333");
 15
 16
                                head2.getSiguiente().getSiguiente().setDato(333);
 17
                                Nodo<Integer> aux = head2;
18
                                System.out.print("|");
19 -
                                while (aux != null) {
                                       System.out.print(aux.getDato() + "| -> |");
20
21
                                         aux = aux.getSiguiente();
 22
23
                                System.out.print("null|\n");
24
                                System.out.println("integrando 700 al final");
 25
                                head2.getSiguiente().getSiguiente().getSiguiente().getSiguiente().setSiguiente(new Nodo<>(700));
                                Nodo<Integer> aux3 = head2;
26
27
                                System.out.print("|");
28
                                while (aux3 != null) {
                                       System.out.print(aux3.getDato() + "| -> |");
29
 30
                                          aux3 = aux3.getSiguiente();
31
 32
                                {\tt System.} \ out. {\tt print("null|\n");}
                                System.out.println("agregando nuevo nodo");
 33
34
 35
                                head2 = new Nodo <> (50, head2);
                                Nodo<Integer> au = head2;
36
 37
                                System.out.print("|");
38
                                 while (au != null) {
                                       System.out.print(au.getDato() + "| -> |");
39
38
                                    while (au != null) {
                                          System.out.print(au.getDato() + "| -> |");
39
40
                                             au = au.getSiguiente();
41
42
                                   System.out.print("null|\n");
43
                         1
44
               }
```

```
creando la estructura
|100| -> |200| -> |300| -> |400| -> |600| -> |null|
cambiando 300 por 333
|100| -> |200| -> |333| -> |400| -> |600| -> |null|
integrando 700 al final
|100| -> |200| -> |333| -> |400| -> |600| -> |700| -> |null|
agregando nuevo nodo al inicio
|50| -> |100| -> |200| -> |333| -> |400| -> |600| -> |700| -> |null|
```

BUILD SUCCESS