

Tugas 1

1. Method

a. ReplaceData

```
public void replaceData(int index, int value){
    int i = 0;
    Node current = first;
    while(current != null){
        if(index == i) current.data = value;
        i++;
        current = current.next;
    }
}
```

b. getIndex

```
public int getIndex(int value){
    int index=0;
    Node current = first;
    while(current != null){
        if(current.data == value)break;
        index++;
        current = current.next;
    }
    return index;
}
```

c. indexOf

```
public int indexOf(int index){
    int i=0;
    Node current = first;
    while(current != null){
        if(index == i) break;
        i++;
        current = current.next;
    }
    return current != null ? current.data : 0;
}
```

2. Bukti Subscribe

The screenshot shows a YouTube video player with a dark theme. The video title is "METNUM [EXCEL] - Metode Bagi Dua" and the channel name is "obet mubarak" with 394 subscribers. The video has 8,801 views and was uploaded on September 21, 2019. The video content displays an Excel spreadsheet for the bisection method, showing columns for iteration (i), a, b, c, f(a), f(b), f(c), and error (er). The spreadsheet shows the iterative process of finding the root of the equation $f(x) = x^3 + x^2 - 3x - 3$ within the interval [1, 2]. The video also includes a text overlay with the example problem and the steps of the bisection method.

Contoh :

Cari akar persamaan dari :
 $f(x) = x^3 + x^2 - 3x - 3$
Hitunglah sampai mempunyai ketelitian $\alpha = 0.00001$

Carilah akar persamaan dalam interval [1,2]

Langkah-langkah

1. perkorakan nilai a dan b sampai $f(a) \cdot f(b) < 0$
2. Hitung perkiraan pertama (akar persamaan):
 $c = \frac{a+b}{2}$
3. Evaluasi
a. jika $f(a) \cdot f(c) < 0$ maka $b = c$, kemudian lanjutkan langkah 2
b. jika $f(a) \cdot f(c) > 0$ maka $a = c$, kemudian lanjutkan langkah 2
c. jika $f(a) \cdot f(c) = 0$ perhitungan diakhiri

Nama : Nico Ardia Effendy
Kelas : 3J / 202010370311467