

Nama : Deanissa Sherly Sabilla

Kelas / Absen : SIB 1B / 06

-UTS-

1. Class Rekening

```
4 public class Rekening06 {
5
6     int noRekening;
7     String nama;
8     String namaIbu;
9     String phone;
10    String email;
11
12    public Rekening06 (int noRek, String nm, String phn, String em) {
13        noRekening = noRek;
14        nama = nm;
15        phone = phn;
16        email = em;
17    }
18    //Method Tampil
19    void tampil () {
20        System.out.println("No Rekening = " +noRekening);
21        System.out.println("Nama = "+nama);
22        System.out.println("Phone = "+phone);
23        System.out.println("Email = "+email);
24    }
25 }
```

2. Class Transaksi

```
J Transaksi06.java > Transaksi06 > tampil()
1 public class Transaksi06 {
2     double saldo;
3     double saldoAwal;
4     double saldoAkhir;
5     String tanggalTransaksi;
6     String type;
7
8     public Transaksi06 (double sd, double sAwal, double sAkhir, String tglTran, String ty){
9         saldo = sd;
10        saldoAwal = sAwal;
11        saldoAkhir = sAkhir;
12        tanggalTransaksi = tglTran;
13        type = ty;
14    }
15    //Method Tampil
16    void tampil () {
17        System.out.println("Saldo = " +saldo);
18        System.out.println("Saldo Awal = "+saldoAwal);
19        System.out.println("Saldo Akhir = "+saldoAkhir);
20        System.out.println("Tanggal Transaksi = "+tanggalTransaksi);
21        System.out.println("Type = "+type);
22    }
23 }
```

3. Class Daftar Rekening

```

1 public class DaftarRekening06 {
2     Rekening06 list[];
3     Transaksi06 lis[];
4     int idx;
5
6     DaftarRekening06(int size) {
7         list = new Rekening06[size];
8         idx = 0;
9     }
10
11     void tampil() {
12         for (Rekening06 r : list) {
13             if (r != null) {
14                 r.tampil();
15                 System.out.println(x:"-----");
16             }
17         }
18     }
19
20     void tambah (Rekening06 r){
21         if (idx<list.length){
22             list[idx] = r;
23             idx++;
24         }else {
25             System.out.println(x:"Data Rekening Sudah Penuh!");
26         }
27     }
28
29     void bubbleSort() {
30         for (int i = 0; i < idx - 1; i++) {
31             for (int j = 0; j < idx - i - 1; j++) {
32                 if (list[j] != null && list[j + 1] != null) {
33                     if (list[j].noRekening > list[j + 1].noRekening) {
34                         Rekening06 tmp = list[j];
35                         list[j] = list[j + 1];
36                         list[j + 1] = tmp;
37                     }
38                 }
39             }
40         }
41
42         //Algoritma pencarian data Sequential Searching
43         public int FindSeqSearch (int cari) {
44             int posisi = -1;
45             for (int j = 0; j < list.length; j++) {
46                 if (list[j].noRekening == cari) {
47                     posisi = j;
48                     break;
49                 }
50             }
51             return posisi;
52         }
53
54         public void Tampilposisi (int x, int pos) {
55             if (pos != -1) {
56                 System.out.println("Data : " + x + "ditemukan pada indeks " + pos);
57             } else {
58                 System.out.println("Data " + x + "tidak ditemukan");
59             }
60         }
61
62         public void TampilData (int x, int pos){
63             if (pos != -1) {
64                 System.out.println("No Rekening \t : " + x);
65                 System.out.println("Nama \t : " +list[pos].nama);
66                 System.out.println("Phone \t : " +list[pos].phone);
67                 System.out.println("Email \t : " +list[pos].email);
68                 System.out.println("Saldo \t : " +lis[pos].saldo);
69             } else {
70                 System.out.println("Data " + x + "tidak ditemukan");
71             }
72         }
73     }

```

4. Class Daftar Transaksi

J DaftarTransaksi06.java > DaftarTransaksi06 > TampilData(int, int)

```
1 public class DaftarTransaksi06 {
2     Transaksi06 list[];
3     int idx;
4
5     DaftarTransaksi06(int size) {
6         list = new Transaksi06[size];
7         idx = 0;
8     }
9
10    void tampil() {
11        for (Transaksi06 r : list) {
12            if (r != null) {
13                r.tampil();
14                System.out.println(x: "-----");
15            }
16        }
17    }
18
19    void tambah (Transaksi06 r){
20        if (idx<list.length){
21            list[idx] = r;
22            idx++;
23        }else {
24            System.out.println(x:"Data Rekening Sudah Penuh!");
25        }
26    }
```

```
27    void bubbleSort() {
28        for (int i = 0; i < idx - 1; i++) {
29            for (int j = 0; j < idx - i - 1; j++) {
30                if (list[j] != null && list[j + 1] != null) {
31                    if (list[j].saldo > list[j + 1].saldo) {
32                        Transaksi06 tmp = list[j];
33                        list[j] = list[j + 1];
34                        list[j + 1] = tmp;
35                    }
36                }
37            }
38        }
39    }
40    //Algoritma pencarian data Sequential Searching
41    public int FindSeqSearch (int cari) {
42        int posisi = -1;
43        for (int j = 0; j < list.length; j++) {
44            if (list[j].saldo == cari) {
45                posisi = j;
46                break;
47            }
48        }
49        return posisi;
50    }
```

```
51    public void Tampilposisi (int x, int pos) {
52        if (pos != -1) {
53            System.out.println("Data : " + x + "ditemukan pada indeks " + pos);
54        } else {
55            System.out.println("Data " + x + "tidak ditemukan");
56        }
57    }
58
59    public void TampilData (int x, int pos){
60        if (pos != -1) {
61            System.out.println("No Rekening \t : " + x);
62            System.out.println("Saldo \t : " +list[pos].saldo);
63            System.out.println("Saldo Awal \t : " +list[pos].saldoAwal);
64            System.out.println("Saldo Akhir \t : " +list[pos].saldoAkhir);
65            System.out.println("Tanggal Transaksi \t : " +list[pos].tanggalTransaksi);
66            System.out.println("Type \t : " +list[pos].type);
67        } else {
68            System.out.println("Data " + x + "tidak ditemukan");
69        }
70    }
```

5. Class Main

```
J MainTransaksi06.java > MainTransaksi06 > main(String[])
2 public class MainTransaksi06 {
3     public static void main(String[] args) {
4         Scanner dea06 = new Scanner (System.in);
5         Scanner dea = new Scanner (System.in);
6
7         System.out.println(x:"Masukkan Jumlah Transaksi : ");
8         int jum = dea06.nextInt();
9         dea06.nextLine();
10
11         DaftarRekening06 data = new DaftarRekening06(jum);
12         DaftarTransaksi06 transaksiData = new DaftarTransaksi06(jum);
13
14         System.out.println(x:"-----");
15         System.out.println(x:"Masukan data Rekening  : ");
16         for (int i = 0; i < jum; i++) {
17             System.out.println(x:"-----");
18             System.out.print(s:"No Rekening \t : ");
19             int noRekening = dea06.nextInt ();
20             dea06.nextLine();
21             System.out.print(s:"Nama \t : ");
22             String nama = dea.nextLine ();
23             System.out.print(s:"Phone \t : ");
24             String phone = dea06.nextLine ();
25             System.out.print(s:"Email \t : ");
26             String email = dea.nextLine ();
27
28             Transaksi06 t = new Transaksi06(saldo, saldoAwal, saldoAkhir, tanggalTransaksi, type)
29             transaksiData.tambah(t);
30
31             System.out.println(x:"-----");
32             System.out.println(x:"Data Rekening  : ");
33             System.out.println(x:"Data sebelum di Sorting = ");
34             data.tampil();
35
36             //Berdasarkan No Rekening
37             System.out.println(x:"Data setelah di Sorting berdasarkan Kecil - Besar =");
38             data.bubbleSort();
39             data.tampil();
40
41             System.out.println(x:"-----");
42             System.out.println(x:"-----");
43             System.out.println(x:"Pencarian Data : ");
44             System.out.println(x:"Masukkan No Rekening yang dicari : ");
45             System.out.print(s:"No Rekening : ");
46             int cari = dea06.nextInt();
47             System.out.println(x:"Menggunakan Sequential Search");
48             int posisi = data.FindSeqSearch(cari);
49             data.Tampilposisi(cari, posisi);
50         }
51     }
52 }
```

HASIL OUTPUT :

1. Input Data Transaksi & Data Rekening

```

Masukkan Jumlah Transaksi :
2
-----
Masukan data Rekening :
-----
No Rekening      : 1223
Nama       : Dea
Phone      : 08999999
Email      : dea@gmail.com
Masukkan data Transaksi untuk Rekening 1223:
Saldo: 120000
Saldo Awal: 12000
Saldo Akhir: 12100
Tanggal Transaksi: 2-2-2011
Tipe Transaksi: Cash
-----
No Rekening      : 1221
Nama       : Nindya
Phone      : 0877777
Email      : nindya@gmail.com
Masukkan data Transaksi untuk Rekening 1221:
Saldo: 200000
Saldo Awal: 120000
Saldo Akhir: 120000
Tanggal Transaksi: 2-2-2022
Tipe Transaksi: Debit

```

2. Hasil Tampilan dan setelah di Sorting

```

-----
Data Rekening :
Data sebelum di Sorting =
No Rekening = 1223
Nama = Dea
Phone = 08999999
Email = dea@gmail.com
-----
No Rekening = 1221
Nama = Nindya
Phone = 0877777
Email = nindya@gmail.com
-----
Data setelah di Sorting berdasarkan Kecil - Besar =
No Rekening = 1221
Nama = Nindya
Phone = 0877777
Email = nindya@gmail.com
-----
No Rekening = 1223
Nama = Dea
Phone = 08999999
Email = dea@gmail.com
-----

```

3. Hasil Pencarian

```
-----  
Pencarian Data :  
Masukkan No Rekening yang dicari :  
No Rekening : 1223  
Menggunakan Sequential Search  
Data : 1223ditemukan pada indeks 1  
No Rekening      : 1223  
Nama       : Dea  
Phone      : 08999999  
Email      : dea@gmail.com  
Exception in thread "main" java.lang.NullPointerException: Cannot  
null  
    at DaftarRekening06.TampilData(DaftarRekening06.java:66)  
    at MainTransaksi06.main(MainTransaksi06.java:68)  
PS C:\Users\TOSHIBA\Semester 2\UTS Dea> 
```