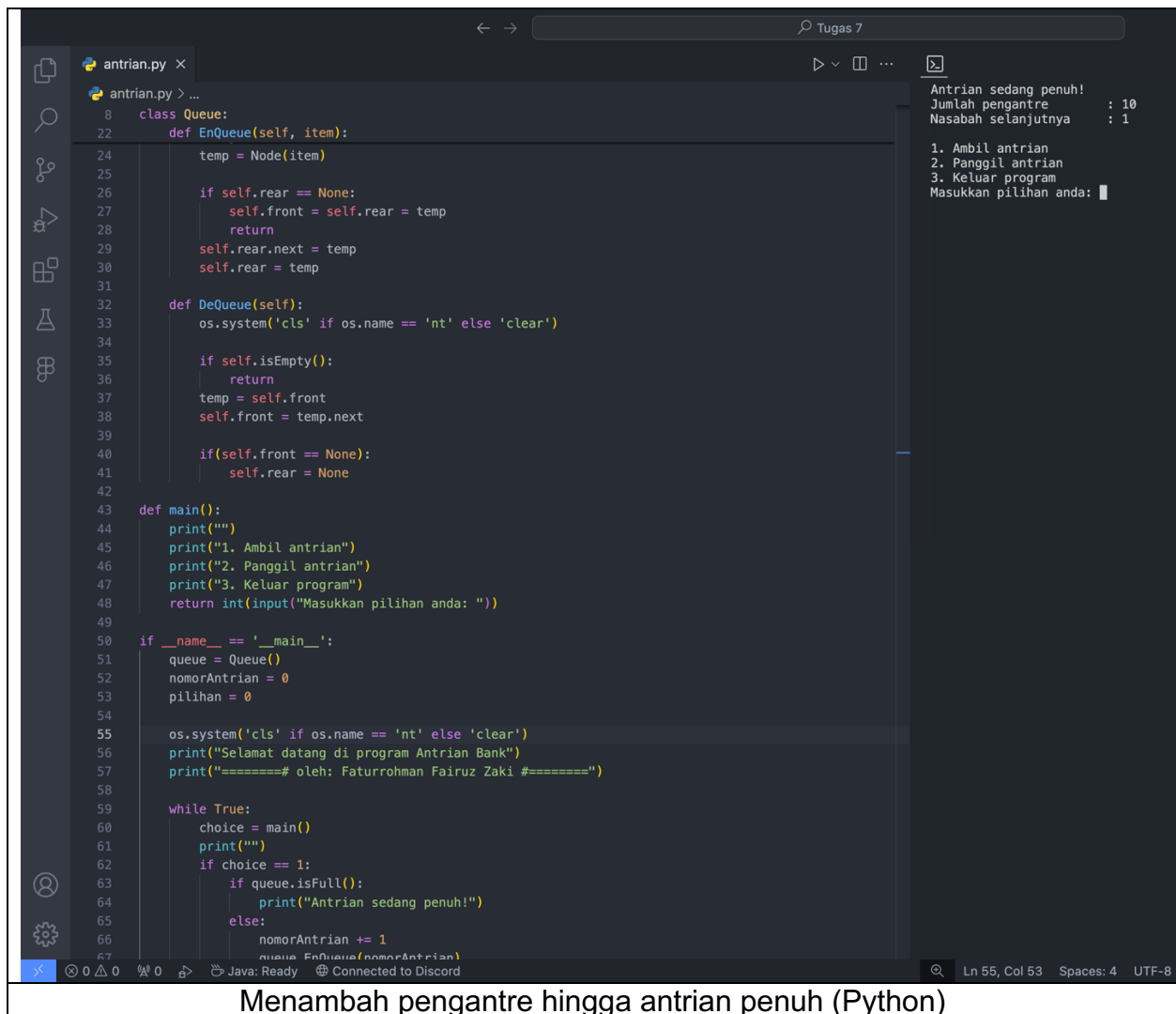


Program Antrian Bank

Implementasi Queue menggunakan Linked List

Perancangan Struktur Data

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Kelas : Informatika C



```
antrian.py x
antrian.py > ...
8 class Queue:
22     def EnQueue(self, item):
24         temp = Node(item)
25
26         if self.rear == None:
27             self.front = self.rear = temp
28             return
29         self.rear.next = temp
30         self.rear = temp
31
32     def DeQueue(self):
33         os.system('cls' if os.name == 'nt' else 'clear')
34
35         if self.isEmpty():
36             return
37         temp = self.front
38         self.front = temp.next
39
40         if(self.front == None):
41             self.rear = None
42
43     def main():
44         print("")
45         print("1. Ambil antrian")
46         print("2. Panggil antrian")
47         print("3. Keluar program")
48         return int(input("Masukkan pilihan anda: "))
49
50 if __name__ == '__main__':
51     queue = Queue()
52     nomorAntrian = 0
53     pilihan = 0
54
55     os.system('cls' if os.name == 'nt' else 'clear')
56     print("Selamat datang di program Antrian Bank")
57     print("=====# oleh: Faturrohman Fairuz Zaki #=====")
58
59     while True:
60         choice = main()
61         print("")
62         if choice == 1:
63             if queue.isFull():
64                 print("Antrian sedang penuh!")
65             else:
66                 nomorAntrian += 1
67                 queue.EnQueue(nomorAntrian)
68
69         elif choice == 2:
70             if queue.isEmpty():
71                 print("Antrian sedang kosong!")
72             else:
73                 queue.DeQueue()
74
75         elif choice == 3:
76             break
77
78     print("Program selesai.")
```

Antrian sedang penuh!
Jumlah pengantre : 10
Nasabah selanjutnya : 1

1. Ambil antrian
2. Panggil antrian
3. Keluar program
Masukkan pilihan anda: 1

Ln 55, Col 53 Spaces: 4 UTF-8

Menambah pengantre hingga antrian penuh (Python)

```
← → Tugas 7
antrian.py ×
antrian.py > ...
8 class Queue:
22 def EnQueue(self, item):
24     temp = Node(item)
25
26     if self.rear == None:
27         self.front = self.rear = temp
28         return
29     self.rear.next = temp
30     self.rear = temp
31
32 def DeQueue(self):
33     os.system('cls' if os.name == 'nt' else 'clear')
34
35     if self.isEmpty():
36         return
37     temp = self.front
38     self.front = temp.next
39
40     if(self.front == None):
41         self.rear = None
42
43 def main():
44     print("")
45     print("1. Ambil antrian")
46     print("2. Panggil antrian")
47     print("3. Keluar program")
48     return int(input("Masukkan pilihan anda: "))
49
50 if __name__ == '__main__':
51     queue = Queue()
52     nomorAntrian = 0
53     pilihan = 0
54
55     os.system('cls' if os.name == 'nt' else 'clear')
56     print("Selamat datang di program Antrian Bank")
57     print("=====# oleh: Faturrohman Fairuz Zaki #=====")
58
59     while True:
60         choice = main()
61         print("")
62         if choice == 1:
63             if queue.isFull():
64                 print("Antrian sedang penuh!")
65             else:
66                 nomorAntrian += 1
67                 queue.EnQueue(nomorAntrian)
68
69         elif choice == 2:
70             queue.DeQueue()
71             nomorAntrian -= 1
72             print(f"Antrian sekarang: {nomorAntrian}")
73
74         elif choice == 3:
75             print("Program selesai.")
76             break
77
78     print(f"Belum ada pengantre!\nJumlah pengantre : {nomorAntrian}")
79
80     print("1. Ambil antrian\n2. Panggil antrian\n3. Keluar program\nMasukkan pilihan anda: ")
81
82
Ln 55, Col 53 Spaces: 4 UTF-
```

Memanggil nasabah hingga pengantre habis (Python)

```
74 public class Antrian {
75     Queue antrianBank = new Queue();
76     int nomorAntrian = 0;
77     int pilihan = 0;
78     Scanner input = new Scanner(System.in);
79
80     System.out.print(s:"\033[H\033[2J");
81     System.out.flush();
82
83     System.out.println(x:"Selamat datang di program Antrian Bank");
84     System.out.println(x:"oleh Faturrohman Fairuz Zaki");
85     do {
86         System.out.println(x:"1. Ambil Antrian");
87         System.out.println(x:"2. Panggil Antrian");
88         System.out.println(x:"3. Keluar program");
89         System.out.print(s:"Masukkan pilihan anda : ");
90         pilihan = input.nextInt();
91         input.nextLine();
92         System.out.println();
93         switch (pilihan) {
94             case 1:
95                 nomorAntrian++;
96                 antrianBank.enqueue(nomorAntrian);
97                 break;
98             case 2:
99                 antrianBank.dequeue();
100                break;
101             case 3:
102                System.out.print(s:"\033[H\033[2J");
103                System.out.flush();
104                System.out.println(x:"Terima kasih telah menggunakan program ini!");
105                System.exit(status:0);
106            default:
107                System.out.println(x:"Input tidak valid!");
108                break;
109        }
110        System.out.println("Jumlah pengantre\t: " + antrianBank.size);
111        if (antrianBank.size > 0) {
112            System.out.println("Nasabah selanjutnya\t: " + antrianBank.front());
113        }
114        System.out.println();
115    } while (pilihan != 3);
116    input.close();
117 }
```

Antrian sudah mencapai batas maksimum.
Jumlah pengantre : 10
Nasabah selanjutnya : 1

1. Ambil Antrian
2. Panggil Antrian
3. Keluar program
Masukkan pilihan anda : 1

Ln 29, Col 70 Spaces: 4

Menambah pengantre hingga antrian penuh (Java)

```
74 public class Antrian {
75     Queue enqueue(int)
76     public static void main(String[] args) {
77
78         Queue antrianBank = new Queue();
79         int nomorAntrian = 0;
80         int pilihan = 0;
81         Scanner input = new Scanner(System.in);
82
83         System.out.print(s:"\033[H\033[2J");
84         System.out.flush();
85
86         System.out.println(x:"Selamat datang di program Antrian Bank");
87         System.out.println(x:"oleh Faturrohman Fairuz Zaki");
88         do {
89             System.out.println(x:"1. Ambil Antrian");
90             System.out.println(x:"2. Panggil Antrian");
91             System.out.println(x:"3. Keluar program");
92             System.out.print(s:"Masukkan pilihan anda : ");
93             pilihan = input.nextInt();
94             input.nextLine();
95             System.out.println();
96             switch (pilihan) {
97                 case 1:
98                     nomorAntrian++;
99                     antrianBank.enqueue(nomorAntrian);
100                    break;
101                 case 2:
102                     antrianBank.dequeue();
103                     break;
104                 case 3:
105                     System.out.print(s:"\033[H\033[2J");
106                     System.out.flush();
107                     System.out.println(x:"Terima kasih telah menggunakan program ini!");
108                     System.exit(status:0);
109                 default:
110                     System.out.println(x:"Input tidak valid!");
111                     break;
112             }
113             System.out.println("Jumlah pengantre\t: " + antrianBank.size);
114             if (antrianBank.size > 0) {
115                 System.out.println("Nasabah selanjutnya\t: " + antrianBank.front());
116             }
117             System.out.println();
118         } while (pilihan != 3);
119         input.close();
120     }
121 }
```

Belum ada pengantre!
Jumlah pengantre : 0

1. Ambil Antrian
2. Panggil Antrian
3. Keluar program
Masukkan pilihan anda :

Ln 29, Col 70

Memanggil nasabah hingga pengantre habis (Java)