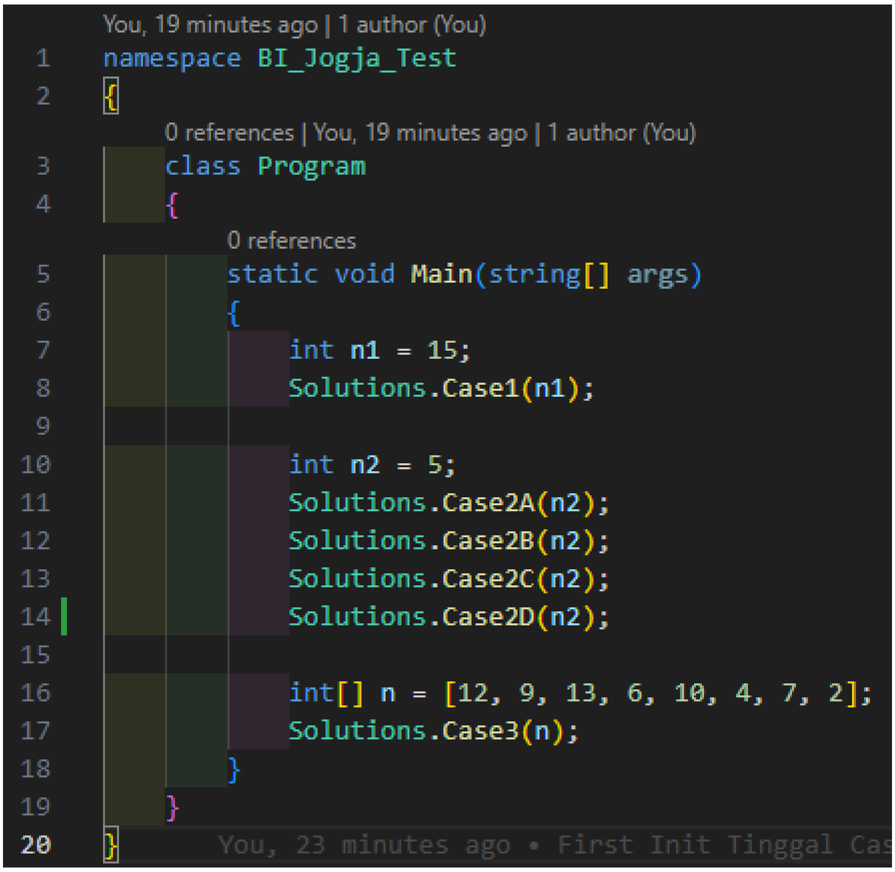
Nama: Kevin Octavianus Halim

Github: https://github.com/CyaVain/bi_jogja_test

Tools Yang Digunakan:

- Visual Studio Code C#
- MySQL WorkBench Community Edition

Class Program:

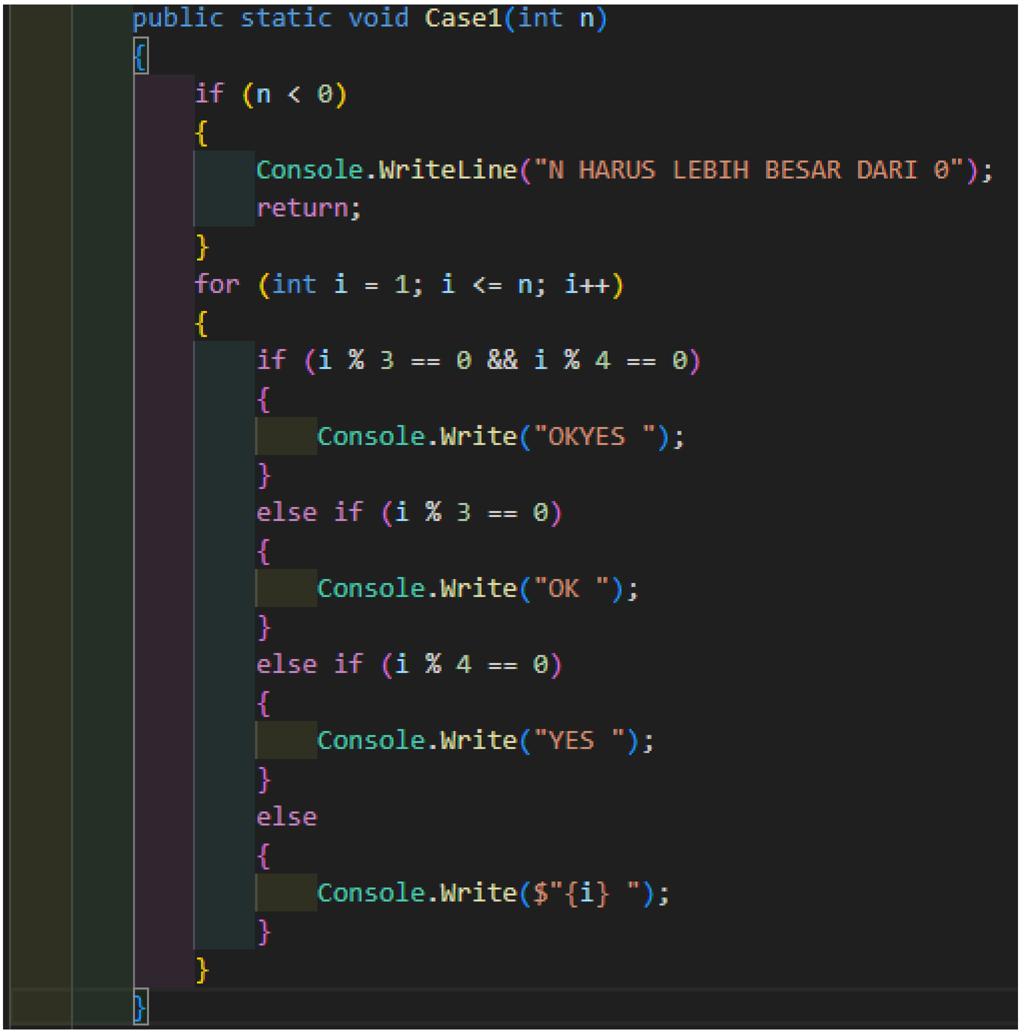


```
You, 19 minutes ago | 1 author (You)
namespace BI_Jogja_Test
{
    0 references | You, 19 minutes ago | 1 author (You)
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            int n1 = 15;
            Solutions.Case1(n1);

            int n2 = 5;
            Solutions.Case2A(n2);
            Solutions.Case2B(n2);
            Solutions.Case2C(n2);
            Solutions.Case2D(n2);

            int[] n = [12, 9, 13, 6, 10, 4, 7, 2];
            Solutions.Case3(n);
        }
    }
}       You, 23 minutes ago • First Init Tinggal Cas
```

JAWABAN

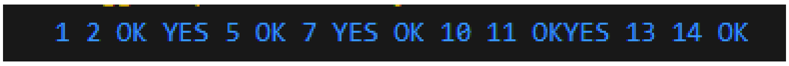
Case 1

Code



```
public static void Case1(int n)
{
    if (n < 0)
    {
        Console.WriteLine("N HARUS LEBIH BESAR DARI 0");
        return;
    }
    for (int i = 1; i <= n; i++)
    {
        if (i % 3 == 0 && i % 4 == 0)
        {
            Console.Write("OKYES ");
        }
        else if (i % 3 == 0)
        {
            Console.Write("OK ");
        }
        else if (i % 4 == 0)
        {
            Console.Write("YES ");
        }
        else
        {
            Console.Write($"{i} ");
        }
    }
}
```

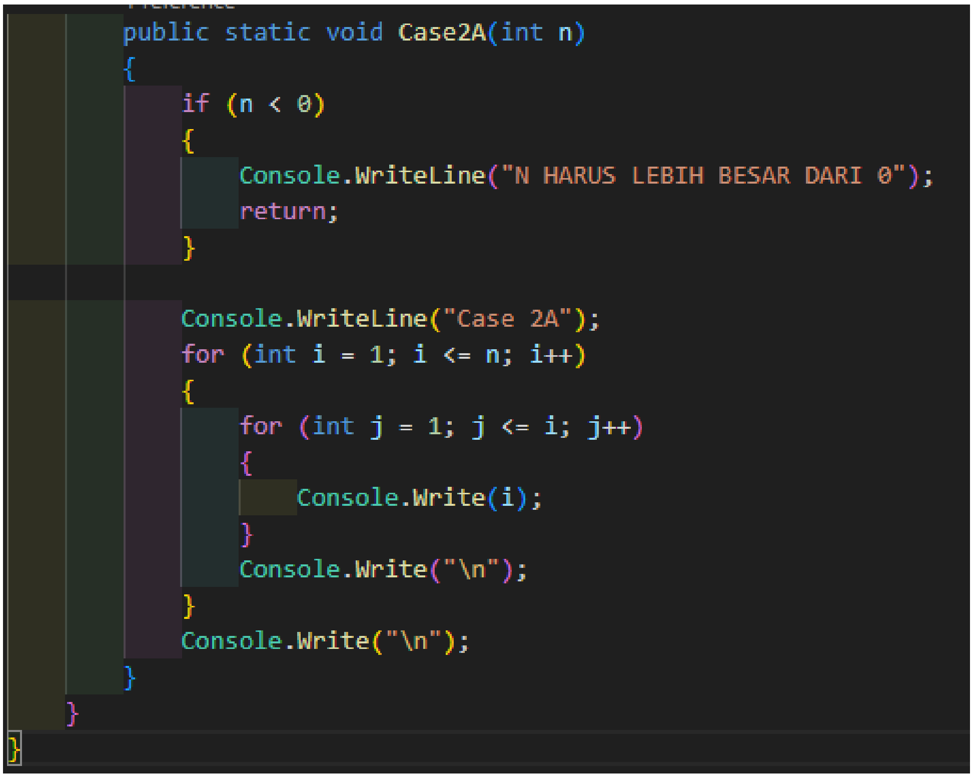
Output



```
1 2 OK YES 5 OK 7 YES OK 10 11 OKYES 13 14 OK
```

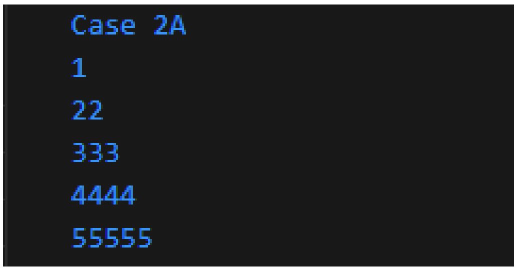
Case 2A

Code



```
        public static void Case2A(int n)
        {
            if (n < 0)
            {
                Console.WriteLine("N HARUS LEBIH BESAR DARI 0");
                return;
            }

            Console.WriteLine("Case 2A");
            for (int i = 1; i <= n; i++)
            {
                for (int j = 1; j <= i; j++)
                {
                    Console.Write(i);
                }
                Console.Write("\n");
            }
            Console.Write("\n");
        }
    }
}
```

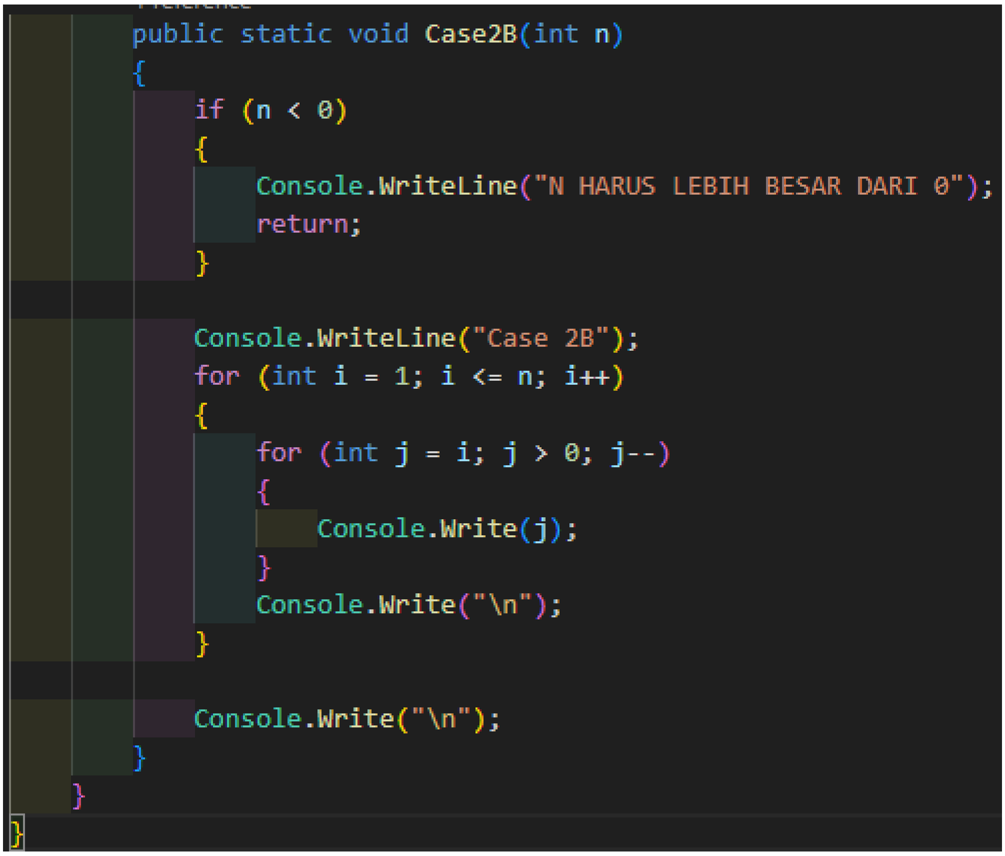
Output



```
Case 2A
1
22
333
4444
55555
```

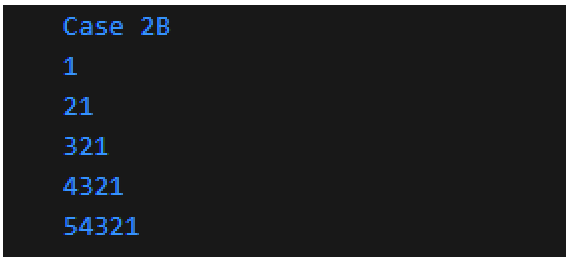
Case 2B

Code



```
        public static void Case2B(int n)
        {
            if (n < 0)
            {
                Console.WriteLine("N HARUS LEBIH BESAR DARI 0");
                return;
            }

            Console.WriteLine("Case 2B");
            for (int i = 1; i <= n; i++)
            {
                for (int j = i; j > 0; j--)
                {
                    Console.Write(j);
                }
                Console.Write("\n");
            }

            Console.Write("\n");
        }
    }
}
```

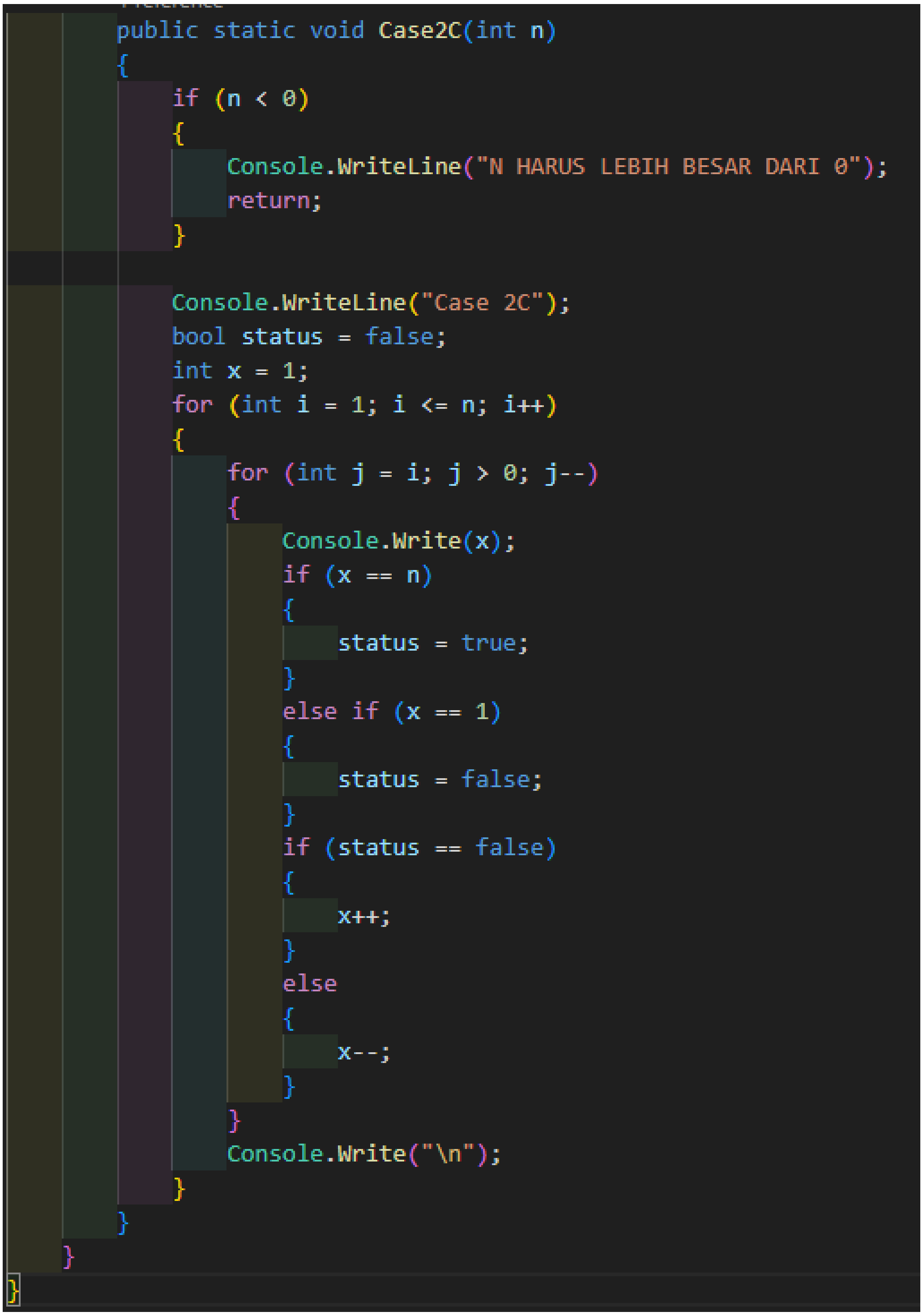
Output



```
Case 2B
1
21
321
4321
54321
```

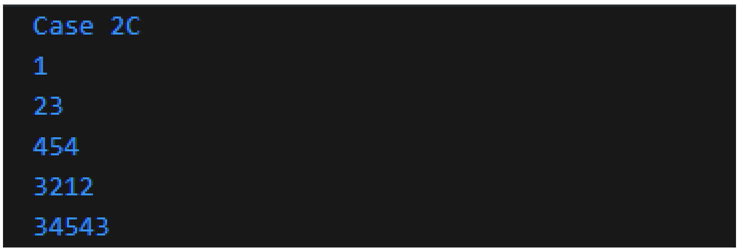
Case 2C

Code



```
        public static void Case2C(int n)
        {
            if (n < 0)
            {
                Console.WriteLine("N HARUS LEBIH BESAR DARI 0");
                return;
            }

            Console.WriteLine("Case 2C");
            bool status = false;
            int x = 1;
            for (int i = 1; i <= n; i++)
            {
                for (int j = i; j > 0; j--)
                {
                    Console.Write(x);
                    if (x == n)
                    {
                        status = true;
                    }
                    else if (x == 1)
                    {
                        status = false;
                    }
                    if (status == false)
                    {
                        x++;
                    }
                    else
                    {
                        x--;
                    }
                }
                Console.Write("\n");
            }
        }
    }
}
```

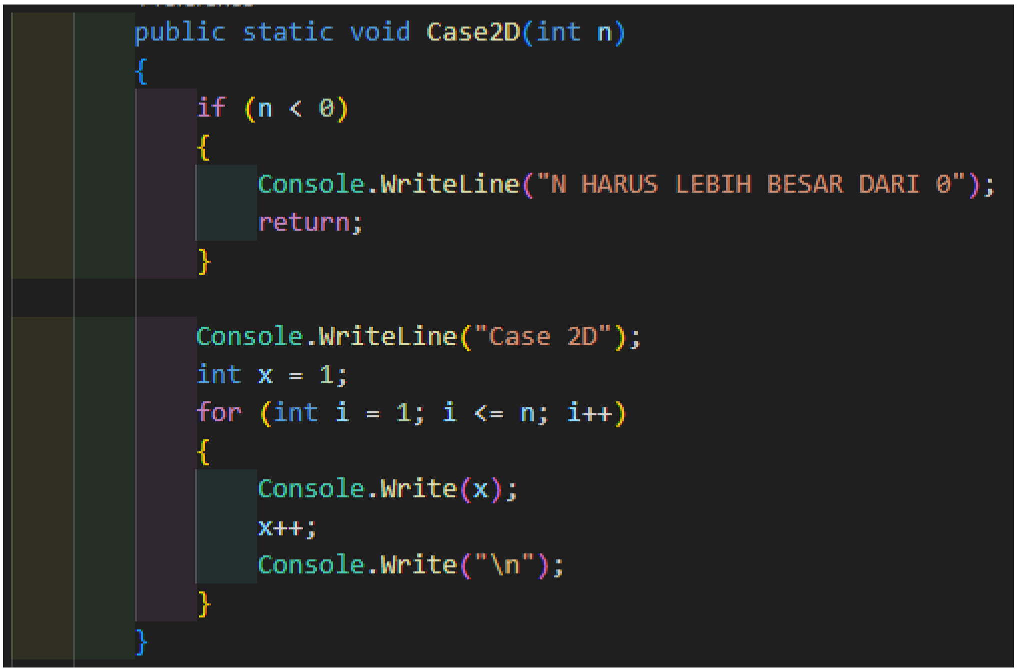
Output



```
Case 2C
1
23
454
3212
34543
```

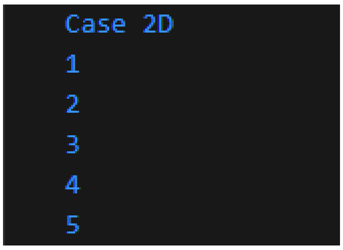
Case 2D

Code



```
public static void Case2D(int n)
{
    if (n < 0)
    {
        Console.WriteLine("N HARUS LEBIH BESAR DARI 0");
        return;
    }

    Console.WriteLine("Case 2D");
    int x = 1;
    for (int i = 1; i <= n; i++)
    {
        Console.Write(x);
        x++;
        Console.Write("\n");
    }
}
```

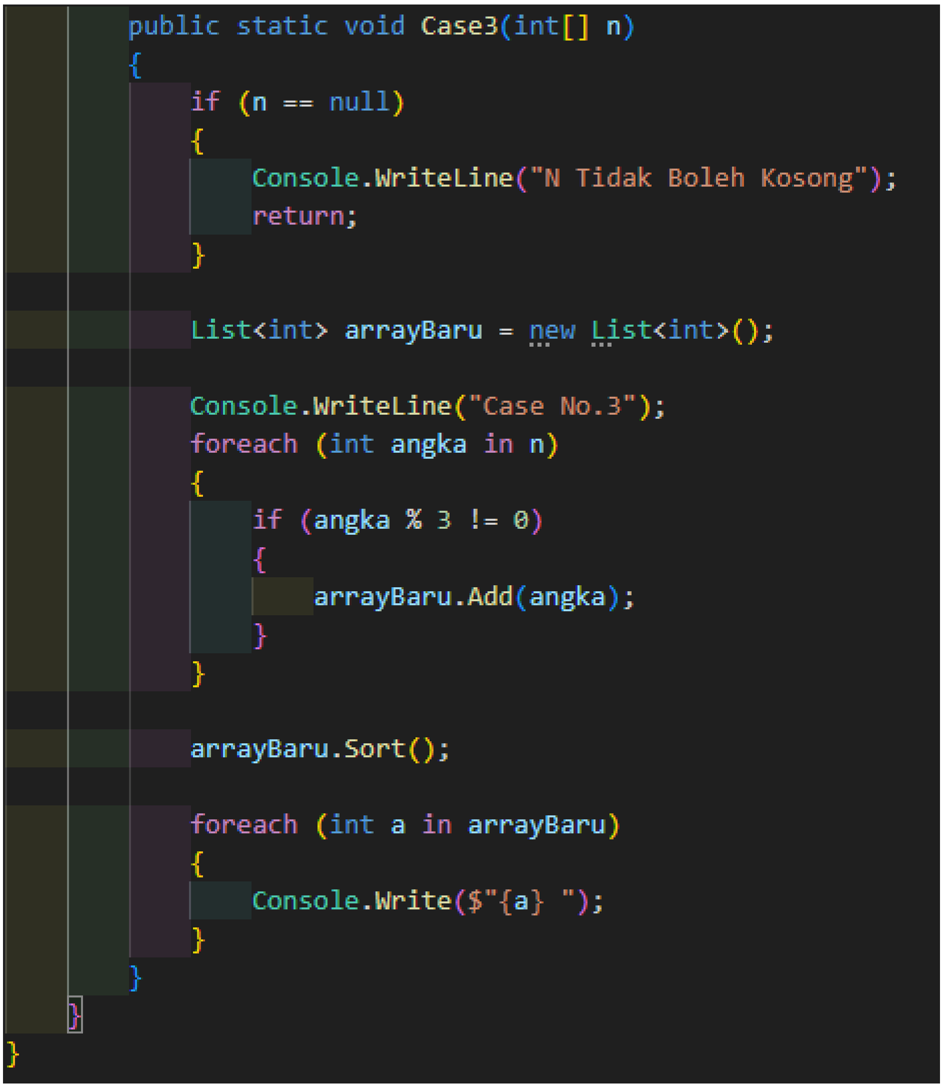
Output



```
Case 2D
1
2
3
4
5
```

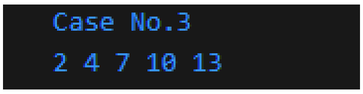
Case 3

Code



```
        public static void Case3(int[] n)
        {
            if (n == null)
            {
                Console.WriteLine("N Tidak Boleh Kosong");
                return;
            }

            List<int> arrayBaru = new List<int>();

            Console.WriteLine("Case No.3");
            foreach (int angka in n)
            {
                if (angka % 3 != 0)
                {
                    arrayBaru.Add(angka);
                }
            }

            arrayBaru.Sort();

            foreach (int a in arrayBaru)
            {
                Console.Write($"{a} ");
            }
        }
    }
}
```

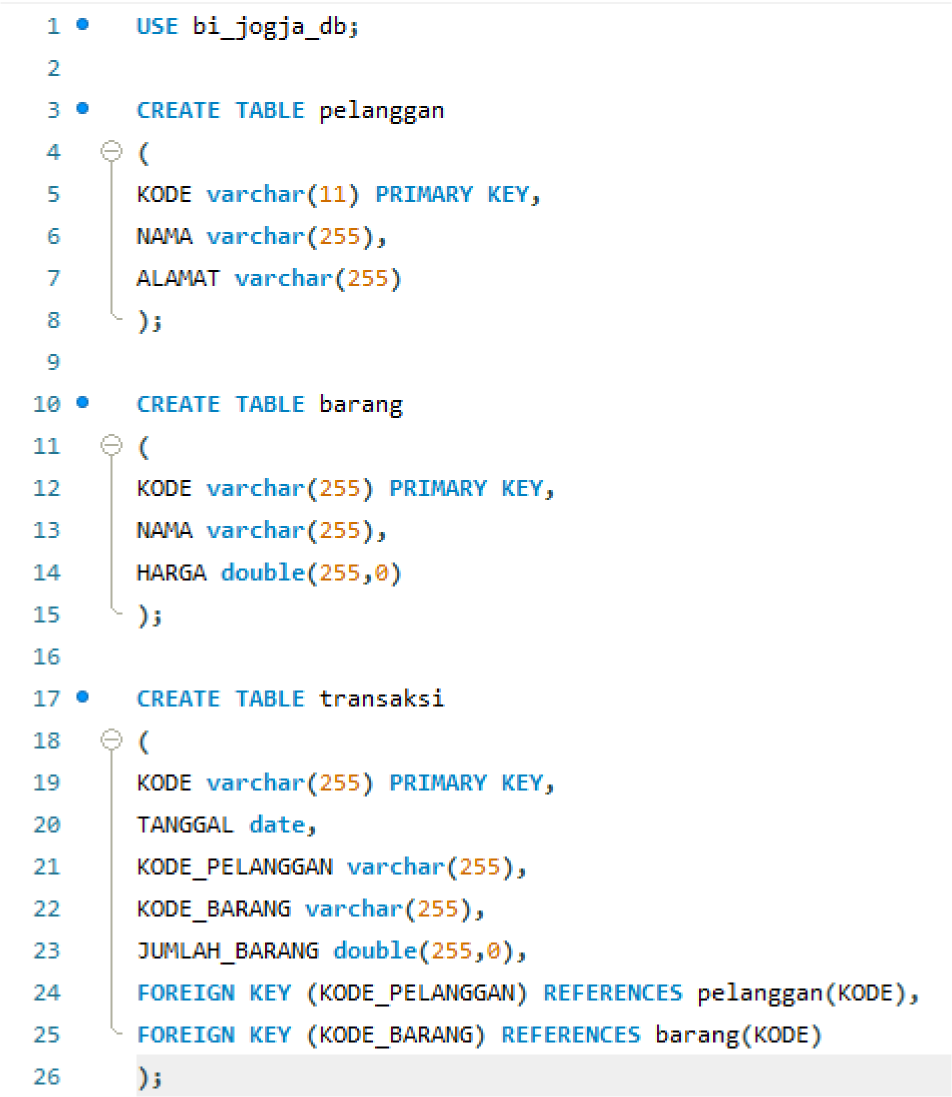
Output



```
Case No.3
2 4 7 10 13
```

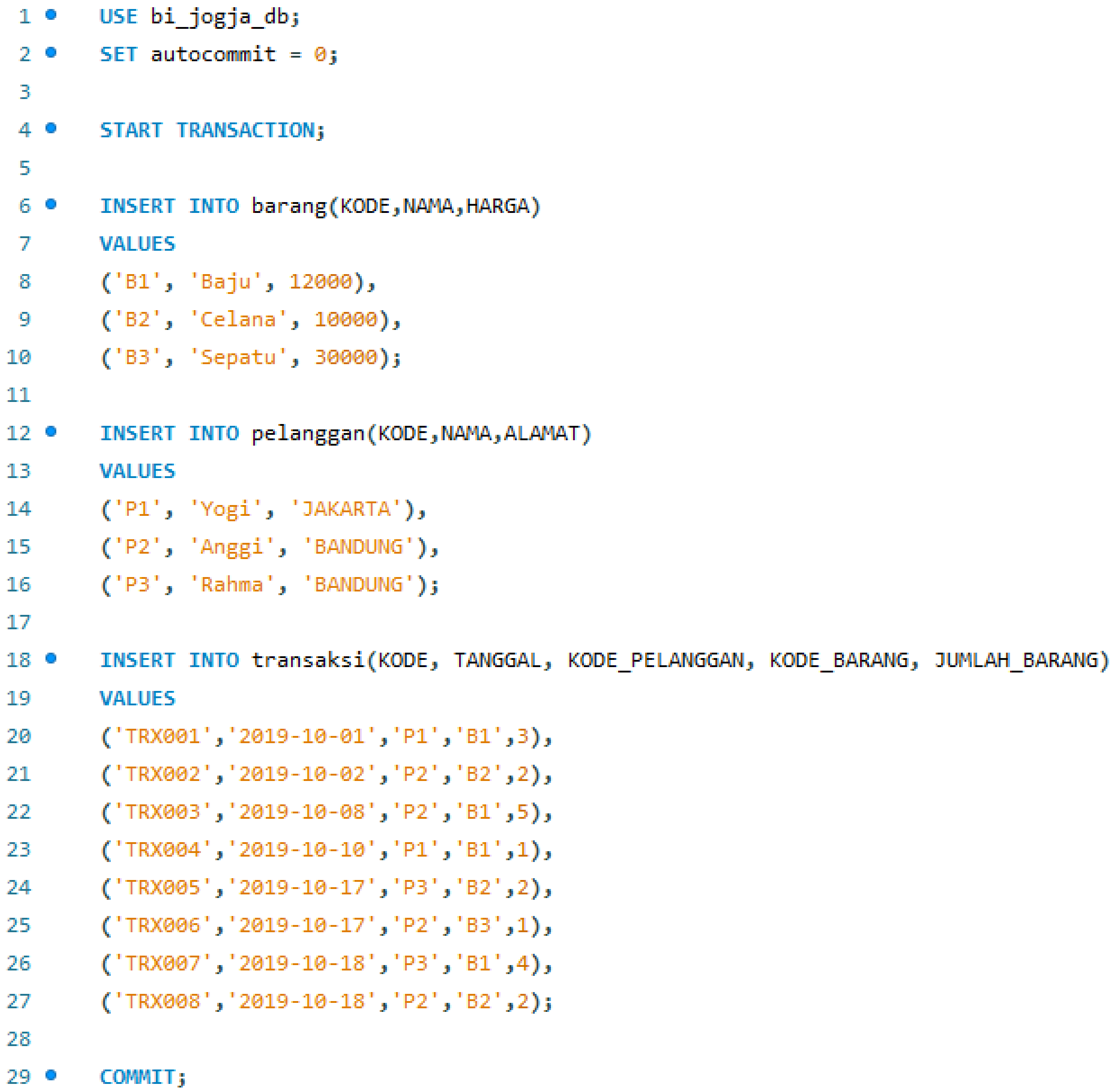
Case 4

DDL



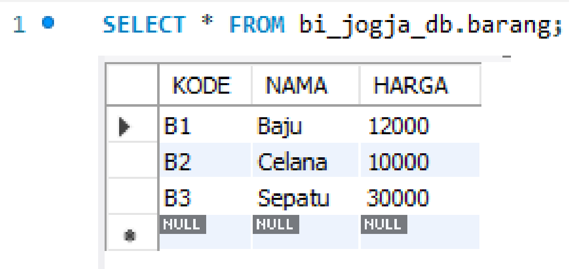
```sql
USE bi_jogja_db;

CREATE TABLE pelanggan
(
KODE varchar(11) PRIMARY KEY,
NAMA varchar(255),
ALAMAT varchar(255)
);

CREATE TABLE barang
(
KODE varchar(255) PRIMARY KEY,
NAMA varchar(255),
HARGA double(255,0)
);

CREATE TABLE transaksi
(
KODE varchar(255) PRIMARY KEY,
TANGGAL date,
KODE_PELANGGAN varchar(255),
KODE_BARANG varchar(255),
JUMLAH_BARANG double(255,0),
FOREIGN KEY (KODE_PELANGGAN) REFERENCES pelanggan(KODE),
FOREIGN KEY (KODE_BARANG) REFERENCES barang(KODE)
);
```

DML



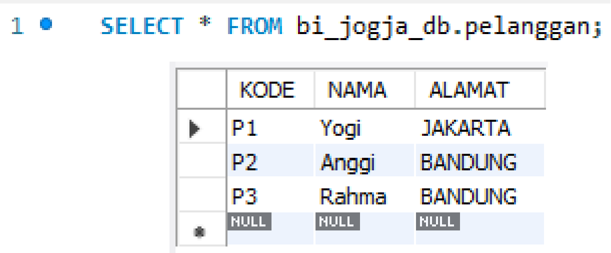
```sql
USE bi_jogja_db;
SET autocommit = 0;

START TRANSACTION;

INSERT INTO barang(KODE,NAMA,HARGA)
VALUES
('B1', 'Baju', 12000),
('B2', 'Celana', 10000),
('B3', 'Sepatu', 30000);

INSERT INTO pelanggan(KODE,NAMA,ALAMAT)
VALUES
('P1', 'Yogi', 'JAKARTA'),
('P2', 'Anggi', 'BANDUNG'),
('P3', 'Rahma', 'BANDUNG');

INSERT INTO transaksi(KODE, TANGGAL, KODE_PELANGGAN, KODE_BARANG, JUMLAH_BARANG)
VALUES
('TRX001','2019-10-01','P1','B1',3),
('TRX002','2019-10-02','P2','B2',2),
('TRX003','2019-10-08','P2','B1',5),
('TRX004','2019-10-10','P1','B1',1),
('TRX005','2019-10-17','P3','B2',2),
('TRX006','2019-10-17','P2','B3',1),
('TRX007','2019-10-18','P3','B1',4),
('TRX008','2019-10-18','P2','B2',2);

COMMIT;
```

Output



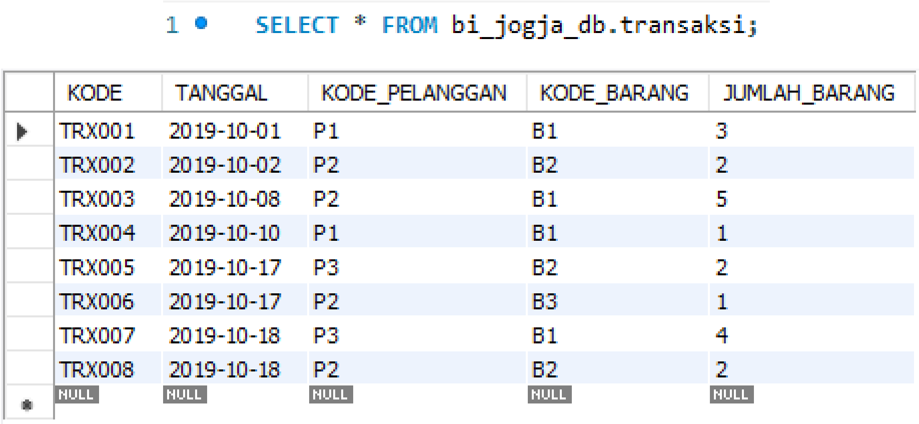
```
SELECT * FROM bi_jogja_db.barang;
```

KODE	NAMA	HARGA
B1	Baju	12000
B2	Celana	10000
B3	Sepatu	30000
NULL	NULL	NULL



```
SELECT * FROM bi_jogja_db.pelanggan;
```

KODE	NAMA	ALAMAT
P1	Yogi	JAKARTA
P2	Anggi	BANDUNG
P3	Rahma	BANDUNG
NULL	NULL	NULL

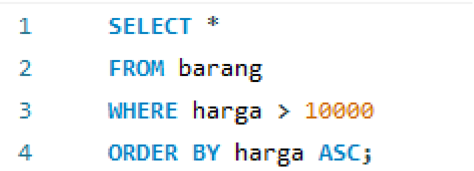


```
SELECT * FROM bi_jogja_db.transaksi;
```

KODE	TANGGAL	KODE_PELANGGAN	KODE_BARANG	JUMLAH_BARANG
TRX001	2019-10-01	P1	B1	3
TRX002	2019-10-02	P2	B2	2
TRX003	2019-10-08	P2	B1	5
TRX004	2019-10-10	P1	B1	1
TRX005	2019-10-17	P3	B2	2
TRX006	2019-10-17	P2	B3	1
TRX007	2019-10-18	P3	B1	4
TRX008	2019-10-18	P2	B2	2
NULL	NULL	NULL	NULL	NULL

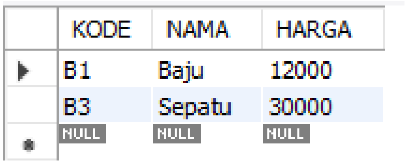
Case 4A

Query



```sql
SELECT *
FROM barang
WHERE harga > 10000
ORDER BY harga ASC;
```

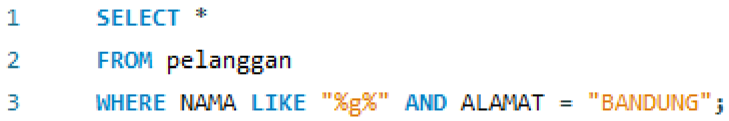
Output



KODE	NAMA	HARGA
B1	Baju	12000
B3	Sepatu	30000
NULL	NULL	NULL

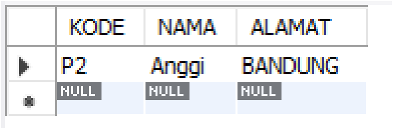
Case 4B

Query



```sql
SELECT *
FROM pelanggan
WHERE NAMA LIKE "%g%" AND ALAMAT = "BANDUNG";
```

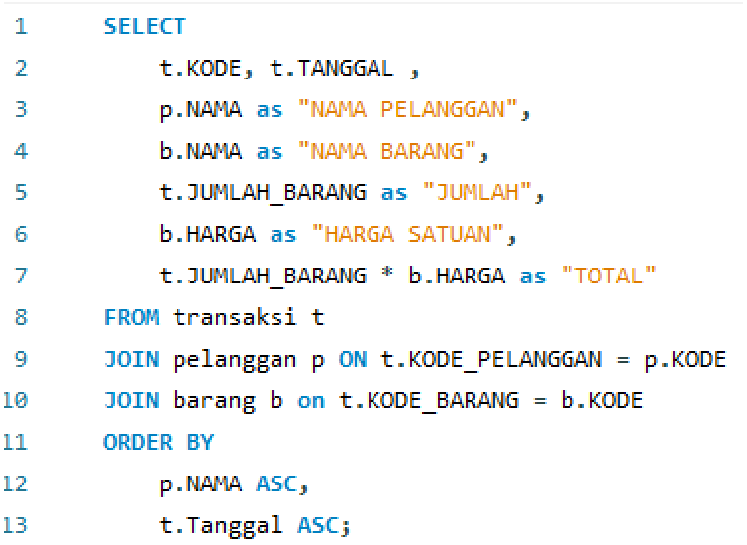
Output



KODE	NAMA	ALAMAT
P2	Anggi	BANDUNG
NULL	NULL	NULL

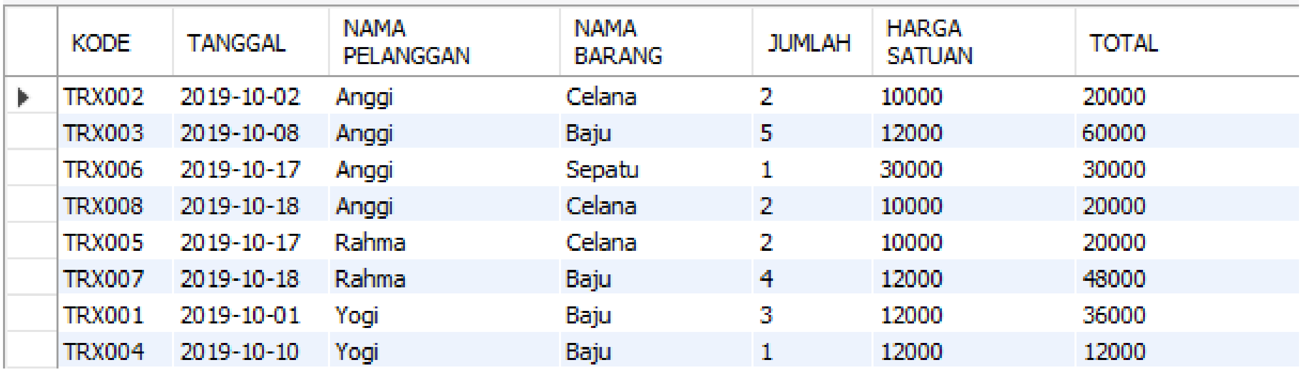
Case 4C

Query



```
SELECT
    t.KODE, t.TANGGAL ,
    p.NAMA as "NAMA PELANGGAN",
    b.NAMA as "NAMA BARANG",
    t.JUMLAH_BARANG as "JUMLAH",
    b.HARGA as "HARGA SATUAN",
    t.JUMLAH_BARANG * b.HARGA as "TOTAL"
FROM transaksi t
JOIN pelanggan p ON t.KODE_PELANGGAN = p.KODE
JOIN barang b on t.KODE_BARANG = b.KODE
ORDER BY
    p.NAMA ASC,
    t.Tanggal ASC;
```

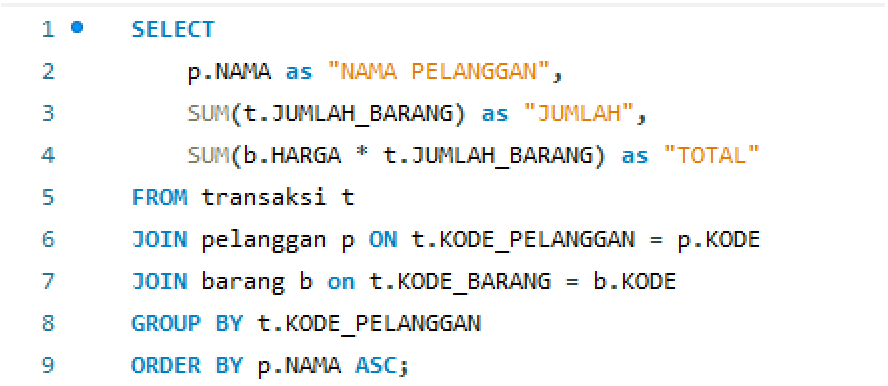
Output



KODE	TANGGAL	NAMA PELANGGAN	NAMA BARANG	JUMLAH	HARGA SATUAN	TOTAL
TRX002	2019-10-02	Anggi	Celana	2	10000	20000
TRX003	2019-10-08	Anggi	Baju	5	12000	60000
TRX006	2019-10-17	Anggi	Sepatu	1	30000	30000
TRX008	2019-10-18	Anggi	Celana	2	10000	20000
TRX005	2019-10-17	Rahma	Celana	2	10000	20000
TRX007	2019-10-18	Rahma	Baju	4	12000	48000
TRX001	2019-10-01	Yogi	Baju	3	12000	36000
TRX004	2019-10-10	Yogi	Baju	1	12000	12000

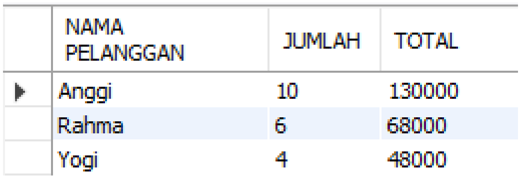
Case 4D

Query



```
SELECT
    p.NAMA as "NAMA PELANGGAN",
    SUM(t.JUMLAH_BARANG) as "JUMLAH",
    SUM(b.HARGA * t.JUMLAH_BARANG) as "TOTAL"
FROM transaksi t
JOIN pelanggan p ON t.KODE_PELANGGAN = p.KODE
JOIN barang b on t.KODE_BARANG = b.KODE
GROUP BY t.KODE_PELANGGAN
ORDER BY p.NAMA ASC;
```

Output



NAMA PELANGGAN	JUMLAH	TOTAL
Anggi	10	130000
Rahma	6	68000
Yogi	4	48000