

Nesne Yönelimli Programlama

- C# ve Java dillerinde veri tipleri

Bildirim

Veri tipi değişken/nesne adı;

Atama

değişken/nesne adı = **değer**;

Veri tipi değişken/nesne adı = **değer**;

C# Veri tipleri

Büyüklik Tipleri

Basit Tipler enum struct

Tamsayılar
Kesirler
karakterler

Referans Tipleri

class interface diziler delegate

Java Veri tipleri

```
graph TD; A[Java Veri tipleri] --> B[Büyüklik -- Basit Tipleri]; A --> C[Referans -- Yapısal Veri Tipleri]; B --> D[Tamsayılar]; B --> E[Kesirler]; B --> F[karakterler]; C --> G[class]; C --> H[enum]; C --> I[interface]; C --> J[diziler];
```

Büyüklik -- Basit Tipleri

Tamsayılar
Kesirler
karakterler

Referans -- Yapısal Veri Tipleri

class enum interface diziler

C# struct

```
struct Student
{
    string name;
    public Student(string n)
    {
        name = n;
    }
    public void Info() { Console.WriteLine("Student :" + name); }
    public override string ToString()
    {
        return name;
    }
}

Student s = new Student("Ali");
```

C# enum

```
enum Days { pazar, pazartesi, sali, carsamba,  
persembe, cuma, cumartesi };  
    Days d = Days.carsamba;
```

C# delegate

```
delegate int Sum(int x, int y);
```

```
int top1a(int x, int y)  
{  
    return x + y;  
}
```

```
Sum t = top1a;
```

```
Func<int, int, int> t2 = delegate (int x, int y) { return  
x + y; };
```

C# interface

```
interface IStudent{void Info(); }
struct Student :IStudent
{
    string name;
    public Student(string n)
    {
        name = n;
    }
    public void Info() { Console.WriteLine("Student :" + name); }
    public override string ToString()
    {
        return name;
    }
}
Student s = new Student("Ali");
IStudent st = s;// new Student("Veli");
```

C# dizi

```
Days[] din = { Days.pazar, Days.pazartesi,  
Days.sali, Days.carsamba, Days.persembe, Days.cuma,  
Days.cumartesi };  
    foreach (Days x in din)  
        Console.WriteLine(x);
```


Java enum

```
enum Days { pazar, pazartesi, sali, carsamba,  
persembe, cuma, cumartesi };  
Days dd =Days.carsamba;
```

Java dizi

```
Days[] dd =Days.values();  
for(Days x:dd)  
    System.out.println(x);
```

Java enum

```
enum TrafficSignal {

    RED("wait",30), GREEN("go",30), YELLOW("slow down",15);

    String action;
    int bekle;

    public String getAction(){
        return this.action;
    }

    public int getDuration() {
        return bekle;
    }

    TrafficSignal(String action,int x){
        this.action = action;
        bekle =x;
    }
}

TrafficSignal[] signals = TrafficSignal.values();
for(TrafficSignal signal : signals){
    System.out.println("name : " + signal.name() + " action: " + signal.getAction()+"Duration :"+signal.getDuration());
}
```

Java interface

```
interface ITraffic{
    public String getAction();
}

enum TrafficSignal implements ITraffic {
    RED("wait",30), GREEN("go",30), YELLOW("slow down",15);
    String action;
    int bekle;
    public String getAction(){
        return this.action;}
    public int getDuration() {
        return bekle;}
    TrafficSignal(String action,int x){
        this.action = action;
        bekle =x; }}

ITraffic [] dar =TrafficSignal.values();
for(ITraffic x : dar){
    System.out.println( " action: "+ x.getAction());
}
```