

→ How memory allocation happens:

```
class Fraction
```

// Reference Type .

```
{
```

```
    public int numerator;
```

```
    public int denominator;
```

```
}
```

```
class MainClass
```

```
{
```

```
    static void main()
```

```
{
```

```
        Fraction fract1 = new
```

```
        Fraction { numerator=1, denominator=2 };
```

```
        Fraction fract2 = new fract1;
```

```
        fract2.numerator = 555;
```

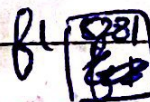
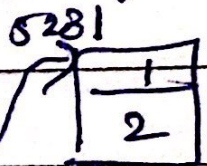
```
        Console.WriteLine(fract1.numerator);
```

```
}
```

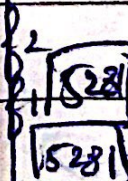
o/p: 555

Stack

Heap



Stack Heap



→ Value type: (It never uses a heap.)

struct Fraction

{

int numerator;

int denominator;

}

class MainClass

{

static void main (String[] args)

{

Fraction fract1 = new Fraction

{ numerator = 1;
denominator = 2; }

Fraction fract2 = fract1;

fract2.numerator = 555;

Console.WriteLine (fract2.numerator);

}

}

Output: 1

Stack

Heap

X

f1 [1/2]

Stack

Heap

X

f2 [1/2]
f1 [1/2]

Stack

Heap

X

f2 [555/2]
f1 [1/2]