

## STEP-BY-STEP execution of CONTAINMENT PROGRAM

```
public static void main(String[] args) {  
    Address addr1=new Address("Pune", "411018");  
}
```

Address object is created on heap, and reference addr1 is assigned to it

Stack

addr1

Heap

city	Pune
pincode	411018

```
public static void main(String[] args) {  
    Address addr1=new Address("Pune", "411018");  
    Courier c1=new Courier(1, "Max", addr1);  
}
```

Courier object is allocated on heap. Then a constructor of Courier is called to initialize an object. The reference addr1 is copied into c1.caddress field

```
public Courier(int cid,String name,Address caddress)  
{  
    this.cid=cid;  
    this.name=name;  
    this.caddress=caddress;  
}
```

addr1

city	Pune
pincode	411018

c1

cid	1
name	Max
caddress	

```
public static void main(String[] args) {  
    Address addr1=new Address("Pune", "411018");  
    Courier c1=new Courier(1, "Max", addr1);  
    System.out.println(c1);  
    Courier c2=new Courier(2, "John", new Address("Mumbai","411001"));  
}
```

1. an address class object is created and its reference is passed to parameterized constructor of Courier class while
2. Courier object is created and reference c2 is assigned

addr1

city	Pune
pincode	411018

c1

cid	1
name	Max
caddress	

c2

cid	1
name	Max
caddress	

city	Pune
pincode	411018