

Basic Fundamental Programming

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Topics: Class & Objects

Class: It is defined as a template that describe the behaviour & states of a particular entity.

- hold data members and methods
- class can be public or default
- abstract class, final class or concrete class(normal)

```
public class Car  
{  
}
```

Object:instance of class

characteristics of Object:

1.State of Object

- represent the data/value of the object

2.Behaviour of Object

- represents the behaviour of an object

```
a1.add();
```

```
a1.sub();
```

```
a1.mul();
```

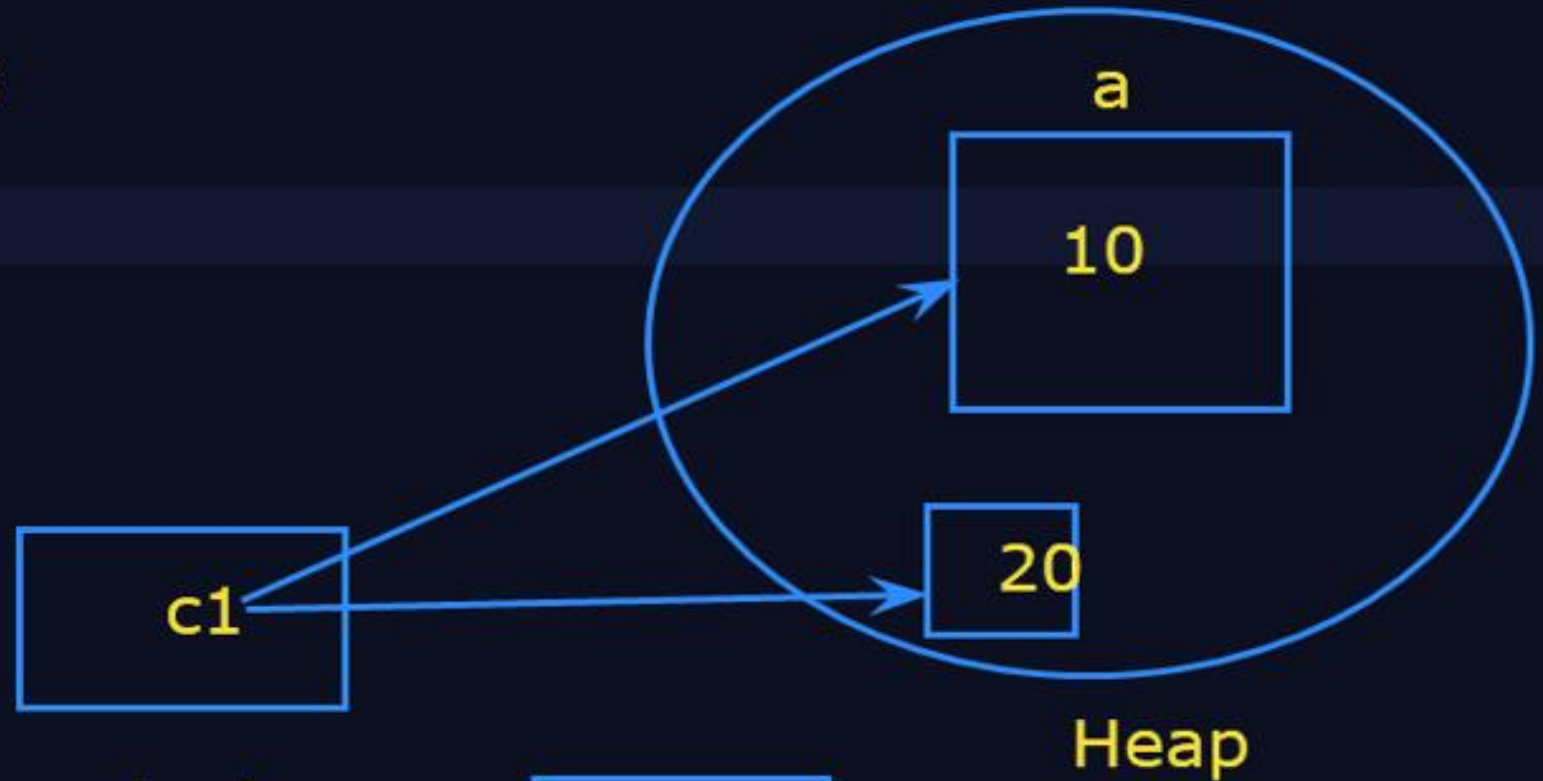
3. Identity of Object

- unique id, which is identified by JVM

e.g.,
`Cake c1 = new Cake();`

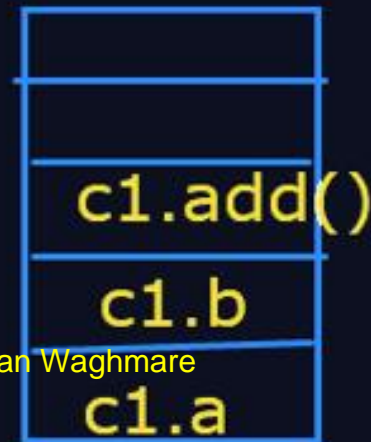
`int a = 10;`

`c1.a;`
`c1.b;`
`c1.add();`



stack

Heap



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Ayush P

Ayush Pratap S

```
class P10  
{
```

```
    public static void main(String args[])  
    {  
        .....  
    }  
}
```



```
1 class P12
2 {
3     int x,y;
4
5     public void getdata(int m, int n)
6     {
7         x=m;
8         y=n;
9     }
10
11     public void adddata(int m, int n)
12     {
13         x=m;
14         y=n;
15         int z = x+y;
16         System.out.println("Z="+z);
17     }
18
19     void show()//method declaration
20     {
21         System.out.println("Hi Everyone !!");
22         System.out.println("X=" + x );
23         System.out.println("Y=" + y );
24     }
25
26     public static void main(String args[])
27     {
28         P12 t1 = new P12();
29         t1.getdata(2,3);
30         t1.show();
31         t1.adddata(5,6);
32     }
33 }
```



```
class P15  
{ int x,y;
```

```
    P15(int x,int y)
```

```
{
```

```
    x=x;
```

```
    y=y;
```

```
}
```

```
void show();//method declaration
```

```
{
```

```
    System.out.println("Hi Everyone !!");
```

```
    System.out.println("X=" + x );
```

```
    System.out.println("Y=" + y );
```

```
}
```

```
public static void main(String args[])
```

```
{
```

```
    P15 t1 = new P15(11,22);
```

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```
    t1.show();
```



```
void display(int x)
{
    this.x = x;
    System.out.println(x);
}

void show()//method declaration
{
    System.out.println("Hi Everyone !!");
    System.out.println("X=" + x );
    System.out.println("Y=" + y );
}

public static void main(String args[])
{
    P15 t1 = new P15(11,22);

    t1.show();
    t1.display(20);
}
```




```
void show()//method declaration
{
    System.out.println("Hi Everyone !!");
    System.out.println("X=" + x );
    System.out.println("Y=" + y );
}
```

```
public static void main(String args[])
{
    P16 t1 = new P16();

    //t1.show();
    //Method 1:
    System.out.println(t1.display(20));

    //Method 2:
    int z =t1.display(56);
    System.out.println(z);
}
```

Planet

- name
- location
- distancefromsum

- +revolve()
- +rotate()