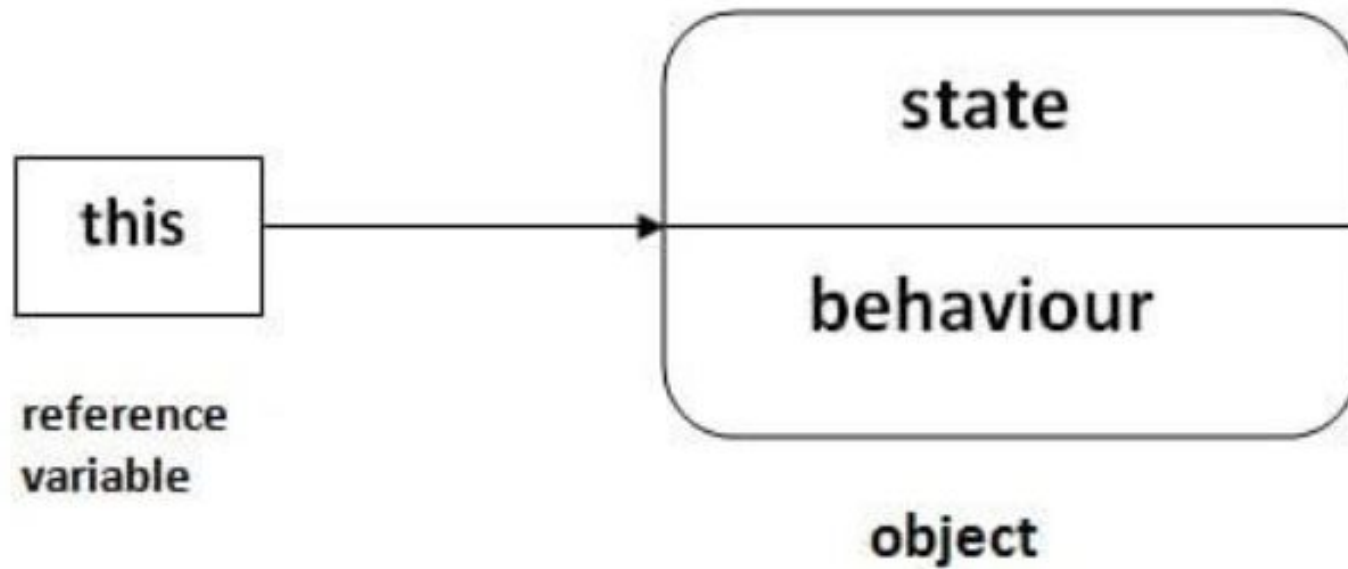


this keyword

this is a reference variable that refers to the current object.



this is a reference variable that refers to the current object.

```
class Demo
{
    void m()
    {
        System.out.println(this); //prints same reference ID
    }
    public static void main(String args[])
    {
        Demo obj=new Demo();
        System.out.println(obj); //prints the reference ID
        obj.m();
    }
}
```

‘Use cases of the this keyword in Java

1. It can be used to refer current class instance variable.
2. this() : to invoke current class constructor.
3. this can be passed as an argument in the method call.
4. this can be passed as argument in the constructor call.

Used to refer current class instance variable

```
class Student{
    int rollno;
    String name;
    float fee;
    Student(int rollno,String name,float fee)
    {
        this.rollno=rollno;
        this.name=name;
        this.fee=fee;
    }
    void display()
    {
        System.out.println(rollno+" "+name+" "+fee);}
}

class TestThis2 {
    public static void main(String args[]){
        Student s1=new Student(111,"ankit",5000f);
        Student s2=new Student(112,"sumit",6000f);
        s1.display();
        s2.display();
    }
}
```

to invoke current class constructor

```
class Demo
{
    Demo()
    {
        System.out.println("hello a");
    }
    Demo(int x)
    {
        this();
        System.out.println(x);
    }
}
class TestThis5
{
    public static void main(String args[])
    {
        Demo a=new Demo(10);
    }
}
```

to invoke current class constructor (Contd...)

```
class hello
{
    hello()
    {
        this(5);
        System.out.println("hello a");
    }
    hello(int x)
    {
        System.out.println(x);
    }
}
class Main
{
    public static void main(String args[])
    {
        hello a=new hello();
    }
}
```

Passed as argument in the method call

```
class S2
{
    void m(S2 a)
    {
        System.out.println("method is invoked");
    }
    void p()
    {
        m(this);
    }
}
class Main{
    public static void main(String args[]){
        S2 s1 = new S2();
        s1.p();
    }
}
```


Passed as argument in the constructor call

```
class B{
    A4 obj;
    B(A4 obj){
        this.obj=obj;
    }
    void display(){
        System.out.println(obj.data); //using data member of A4 class
    }
}
class A4{
    int data=10;
    A4(){
        B b=new B(this);
        b.display();
    }
}
class Main{
    public static void main(String args[]){
        A4 a=new A4();
    }
}
```