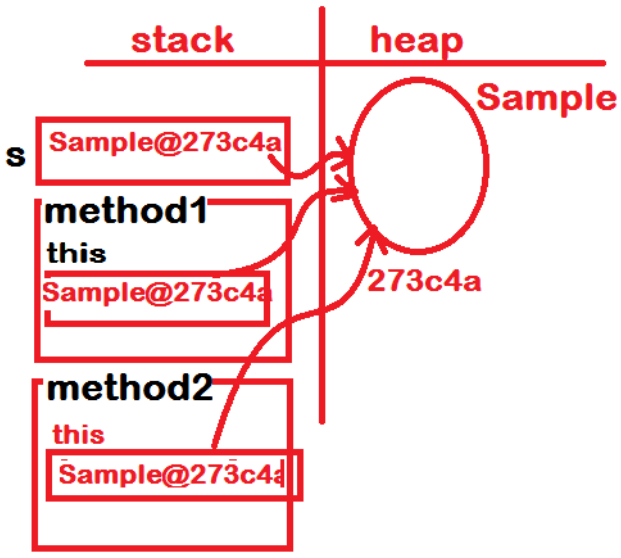
This

- "this " is keyword of reference type
- "this" is existed implicitly in every instance method of the class
- "this" is always used to refer current object by hold its hash code

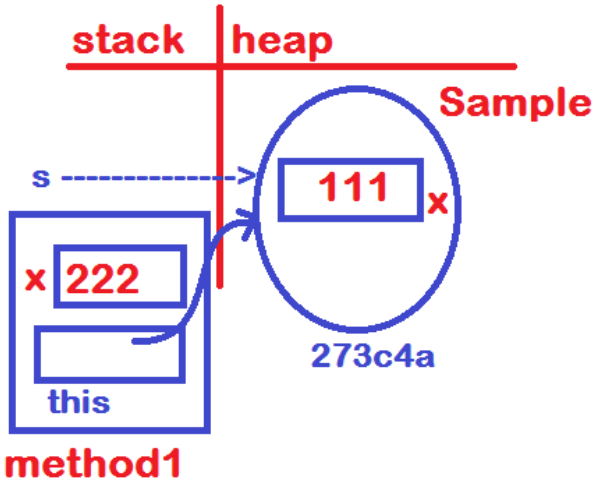
- *Whenever both local and instance fields declare with the same in order to make the differentiation between local and instance fields, Then we have make use "this" for an instance field*

- "this" is not supported in the static context


```
class Sample
{
 void method1( )
  { S.o.pln("m1 : "+this);  }

 void method2()
  {S.o.pln("m2 : "+this); }

 p s v main(String args[ ])
 { Sample s=new Sample( );
   S.o.pln("Main : "+s);
   s.method1( );
   s.method2( );
 }
}
```



```
class Sample
{
   int x=111; //ins.field

   void method1()
   {  int x=222;   //local var
      S.o.pln("x val is : "+x);
      S.o.pln("x val is : "+this.x);
    }

  p s v main(String args[ ])
  {
     Sample s=new Sample( );
              s.method1( );
  }
}
```



Methods with Object Reference

➢ Program to compare content of two objects

```
//Compare.java
class Sample
{   int x,y;  //instance

        void setData(int a,int b) //a,b are local
        { x=a;   y=b; }

        boolean compare(Sample o)
                          //non static mtd | instance mtd
          { if(x==o.x &&  y==o.y)
                  return true;
             else
                       return false; }
```

```
        public static void main(String args[ ])
        { Sample s1=new Sample( );
                s1.setData(10,20 );

         Sample s2=new Sample( );
                s2.setData(110,220);

              boolean b=s1.compare(s2);
              if(b==true)
                    System.out.println("Both are Same");
              else
                    System.out.println("Both are not Same");

   }
}
```

Example 2: Program to copy data from one object to another

```
//Copy Data From one to another
class Sample{
        int x,y; //instance fields

        void setData(int x,int y) //x,y formal acts as local
        { this.x=x;  this.y=y; }

        void copyData(Sample o) //instance mtd
        { x=o.x;   y=o.y; }

        void getData() //non static mtd
        { System.out.println("x val is : "+x);
          System.out.println("y val is : "+y); }
```

```
        public static void main(String args[ ])
        {
                Sample s1=new Sample( );
                        s1.setData(120,250);

                Sample s2=new Sample( );
                        s2.copyData(s1);

                System.out.println("Data from s1");
                s1.getData();

                System.out.println("Data From s2");
                s2.getData();
        }
}
```