```
// Java program to show the usage of Outer Class and "static Nested class" and their object
creation
/*
Points to remember

Outer Class must not be static in any case.
Every class is a separate entity and can access other class variables and method i.e. in order
of parent child relationship where child(Inner Nested class) can access variable and method of
Outer Class but Outer Class can't access variable and method of Inner class.

Here Inner  class is static therefore entire thing is static

*/

class OuterClass
{
    static int a=100;

    int c=300;

    static void output()
    {
        //input();      //static method of OuterClass can't refer to static method of
        InnerClass because
        //for OuterClass input doesn't exist because it is  a kind if super/parent class and in
        java parent don't have access to child class, no jump in hierarchy is accepted.
        System.out.println("This is OuterClass method ");
    }

    void get()
    {
        System.out.println("This is non-static OuterClass method ");
    }

    static class InnerClass
    {

        static int b=200;

        static void input()
        {

            System.out.println("This is static InnerClass static method ");

            //System.out.println("value of static variable 'a' of static InnerClass static
            method = "+a);       //static method can't refer to non-static variable

            //disp();       //static method can't refer to non-static method

            output();       //static method of InnerClass can refer to static method of
            OuterClass but reverse can't happen

            System.out.println("value of static variable 'b' of static InnerClass static method
            = "+b);
        }

        void disp()
        {
            System.out.println("value of static variable 'a' of OuterClass called in InnerClass
            non- static method = "+a);  //allowed because InnerClass and variable 'a' of
            OuterClass are static.
            //System.out.println("value of static variable 'c' of OuterClass called in
            InnerClass non- static method = "+c);        // Not allowed because InnerClass is
            static
            System.out.println("This is non-static InnerClass method ");
```

```
            //get();        // because of static Inner class can't execute but if static is
            removed then it will be executed because it is like child class and calling parent
            class method which is allowed
        }
    }
}

class Static_Nested_Class
{
    public static void main(String args[])
    {
        OuterClass o=new OuterClass();
        o.output();
        //o.input();            // can't access InnerClass method with OuterClass object

        OuterClass.InnerClass obj= new OuterClass.InnerClass();

        obj.disp();
        obj.input();


    }
}
```

Output

```
C:\Users\Dhruv\Desktop\Java>java Static_Nested_Class
This is OuterClass method
value of static variable 'a' of OuterClass called in InnerClass non- static method = 100
This is non-static InnerClass method
This is static InnerClass static method
This is OuterClass method
value of static variable 'b' of static InnerClass static method = 200
```