

Types of Variables

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1. local variable:

The variable which is declared inside the method/block/constructor body is called local variable.
scope of local variable remains only within the method/block/constructor.
local variable is also called temporary variable.

2. global variable:

the variable which is declared outside the method/block/constructor body is called global variable.
scope of global variable remains through the class.
global variable is also called permanent variable.

3. static/class variable:

1. static variable call from same class --> variableName
2. static variable call from diff class --> className.variableName

Note: we can access static global variable in both static & non-static method

4. non-static/instance variable: (instance-object)

3. non-static variable call from same class
4. non-static variable call from diff class

```
package TypesOfVariable;
public class Sample1
{
    //1: example of local & global variable

    int num3=30;    //global variable

    public void m1()
    {
        int num1=10;    //local variable
        System.out.println(num1); //10
        System.out.println(num3); //30
    }

    public void m2()
    {
        int num2=20;    //local variable
        System.out.println(num2); //20
        System.out.println(num3); //30
        //System.out.println(num1);
    }

    public static void main(String[] args)
    {
        Sample1 s1=new Sample1();
        s1.m1();
        s1.m2();
    }
}

package TypesOfVariable;
public class Sample2
{
    //2: example of static global variable

    static int a=10;    //static global variable

    public static void main(String[] args)
    {
        //1: static global variable call from same class
        System.out.println(a);    //variableName

        //2: static global variable call from diff class
        System.out.println(Sample3.b);    //diffClassName.variableName
    }

    public static void m1()
```

```

        {
            System.out.println(a);
        }

        public void m2()
        {
            System.out.println(a);
        }
    }

```

```

package TypesOfVariable;
public class Sample3
{
    static int b=20; //static global variable
}

```

```

package TypesOfVariable;
public class Sample4
{
    //3: example non-static global variable

    int c=10; //non-static global variable

    public static void main(String[] args)
    {
        //1: non-static global variable call from same class
        Sample4 s4=new Sample4();
        System.out.println(s4.c);

        //2: non-static global variable call from diff class
        Sample5 s6=new Sample5();
        System.out.println(s6.d);
    }

    public static void m3()
    {
        Sample4 s5=new Sample4();
        System.out.println(s5.c);
    }

    public void m4()
    {
        System.out.println(c);
    }
}

```

```

package TypesOfVariable;
public class Sample5
{
    int d=40; //non-static global from diff class
}

```