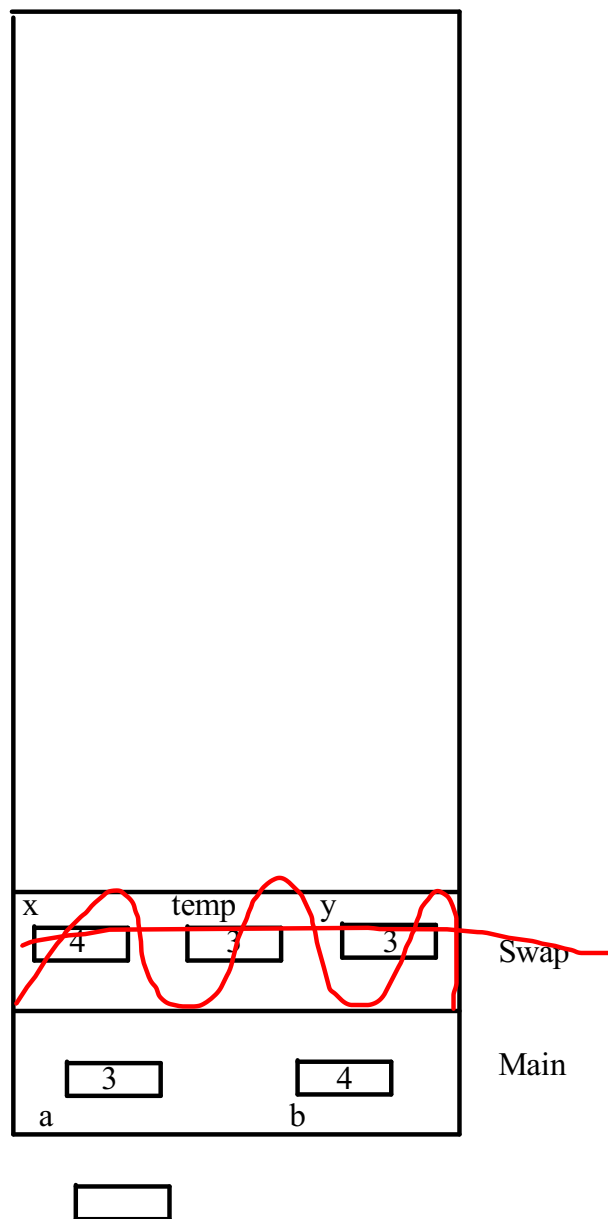
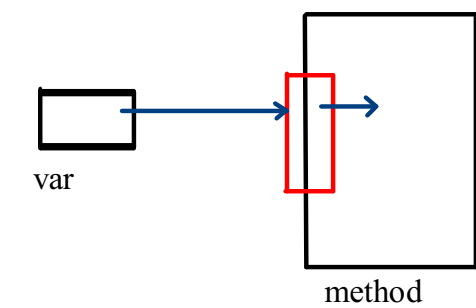


```

class MyClass
{
    public static void Main()
    {
        int a = 3, b = 4;
        Swap(a, b);
        Console.WriteLine($"A = {a}");
        Console.WriteLine($"B = {b}");
    }
    public static void Swap(int x, int y)
    {
        int temp;
        temp = x;
        x = y;
        y = temp;
    }
}

```

Call by Value
(in parameter)

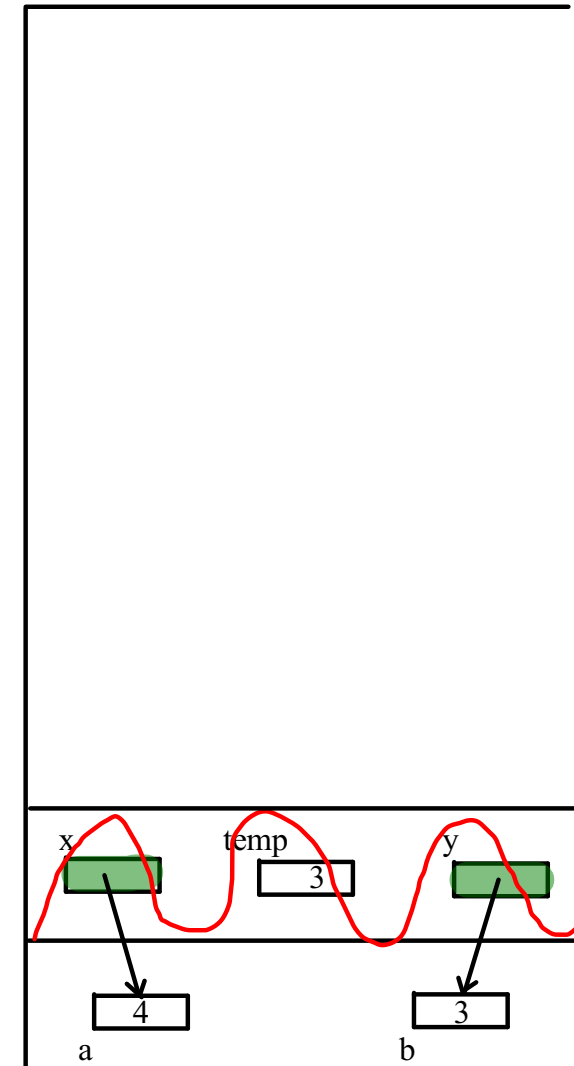
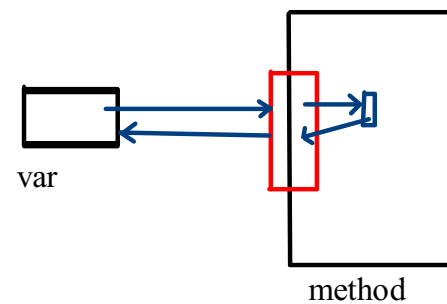


```

class MyClass
{
    public static void Main()
    {
        int a = 3, b = 4;
        Swap(ref a, ref b);
        Console.WriteLine($"A = {a}");
        Console.WriteLine($"B = {b}");
    }
    public static void Swap(ref int x, ref int y)
    {
        int temp;
        temp = x;
        x = y;
        y = temp;
    }
}

```

Call by Reference
(in/out parameter)

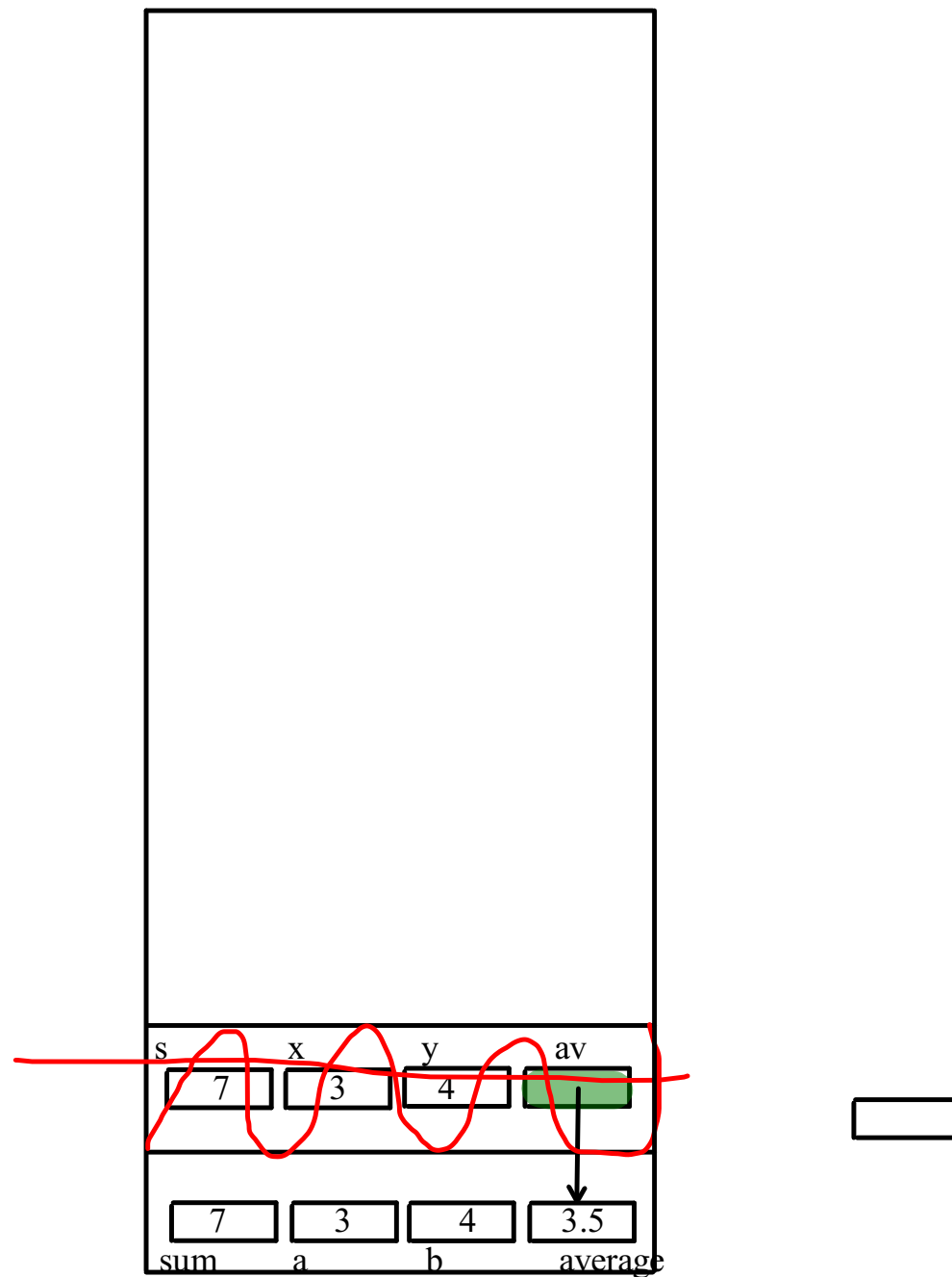
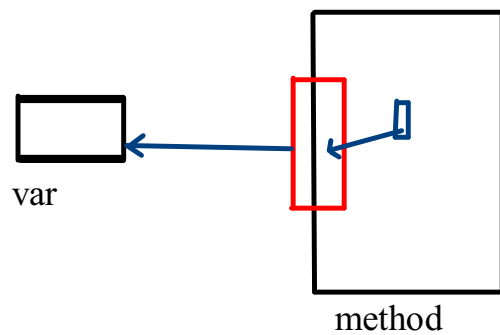


```

class MyClass
{
    public static void Main()
    {
        int a = 3, b = 4;
        float average;
        int sum;
        sum = Calc(a, b, out average);
        Console.WriteLine($"Sum = {sum}");
        Console.WriteLine($"Average = {average}");
    }
    public static int Calc(int x, int y, out float av)
    {
        int s;
        s = x + y;
        av = s/2.0;
        return s;
    }
}

```

out parameter:
 is like ref parameter except:
 out parameter act as uninitialized in the method (even it has prior value)
 So, it must has a value in the method



```

class MyClass
{
    int[] ar = new int[5]; //assume +ve
    string name;

    public void SetName(string s)
    { name = s;}
    public string GetName()
    {return name;}

    public void SetArray(int index, int m)
    {
        if(index >= 0 && index < ar.Length)
        {
            ar[index] = m;
        }
    }
    public int GetArray(int index)
    {
        int val = -1;
        if(index >= 0 && index < ar.Length)
        {
            val = ar[index];
        }
        return val;
    }
}

class test
{
    public static void Main()
    {
        MyClass obj = new MyClass();
        obj.SetArray(3, 7);
        obj[3] = 7;
    }
}

```

```

class MyClass
{
    int[] ar = new int[5]; //assume +ve
    string name;

    public void SetName(string s)
    { name = s;}
    public string GetName()
    {return name;}

    //Indexer
    public int this[int index]
    {
        set
        {
            if(index >= 0 && index < ar.Length)
            {
                ar[index] = value;
            }
        }
        get
        {
            int val = -1;
            if(index >= 0 && index < ar.Length)
            {
                val = ar[index];
            }
            return val;
        }
    }
}

```

