

Question 67: Sending an array to a method could take a long time if the array were big. How are arrays passed to methods?

Answer 67: Arrays are reference type variable, so a reference to the array is passed and no copy of the data is sent. This means changes to an array inside a method are visible in the calling code.

```
using static System.Console;
class Program
{
    static void Main()
    {
        double[] array = { 1, 2 }; //1. Sets array of doubles

        //2. Line below prints array values before ChangeArray is called
        WriteLine($"Before: [{array[0]},{array[1]}"]; Before: [1,2]

        //3. ChangeArray is called, with the array as the argument
        ChangeArray(array);

        //4. Line below prints values from array to show they are different
        WriteLine($"After:[{array[0]},{array[1]}"]; After:[10,7]
    }
    static void ChangeArray(double[] arr) //5. ChangeArray accepts an array
    {
        arr[0] = 10; //6. Change entry at index 0
        arr[1] = 7; //7. Change entry at index 1
    }
}
```

```
static void Main()
{
    double[] array = { 1, 2 };

    WriteLine($"Before: [{array[0]},{array[1]}"];

    ChangeArray(array);

    WriteLine($"After:[{array[0]},{array[1]}"];
}
static void ChangeArray(double[] arr)
{
    arr[0] = 10;
    arr[1] = 7;
}
```

Before ChangeArray is called

array	{double[2]}
[0]	1
[1]	2

Changes made through arr are visible here through array.

array	{double[2]}
[0]	10
[1]	7

