

2018/19 Semester 1

Object Oriented Programming with Applications**Problem Sheet 2 - Wednesday 3rd October 2018¹**

Exercise 2.1. Use generics to write a method that will print the contents of any array to the console. That is, fill in the dots in the code below.

```
static void PrintArray<T>(T[] array)
{
    //....
}
```

Exercise 2.2. Modify the sorting method from the lecture / lab to use generics. You will need a method declaration that looks something like

```
static void MySort<T>(T[] numbers) where T : System.IComparable<T>
```

Moreover, instead of using the usual comparison operator for numbers (i.e. < or >) directly you will need to use the `CompareTo` method provided by the `IComparable` interface.

The one thing to observe is that `numbers[i].CompareTo(numbers[i + 1])` returns 0 if the elements are equal, positive if `numbers[i]` is larger than `numbers[i+1]` and negative otherwise.

The algorithm is called “Bubble sort” if you would like to learn more about it.

¹Last updated 1st October 2018