

## CS1102S Data Structures and Algorithms

### Assignment CC04:

#### Java Details

1. Write a Java class `Counter` that counts the number of instances (direct instances or instances of sub-classes), and prints that number whenever an instance is created.

Example:

```
new Counter();
```

leads to the following output:

```
This is Counter object number: 4
```

(assuming that there were three `Counter` objects previously created)

2. Write a Java class `ThisSuperConstructor` that contains the following line:

```
this();
```

such that replacing the line by

```
super();
```

leads to a different program behavior.

3. Write a Java class `ThisSuperCall` that contains the following line:

```
this.m();
```

such that replacing the line by

```
super.m();
```

leads to a different program behavior.