

Array Lab

1. What does the following code print?

```
double[] values = {0.6, 0.2, 0.3, 0.0, 0.5, 0.3, 0.7};
int limit = values.length/2;

for (int k=0; k<limit; k++) {
    double tmp = values[k];
    values[k] = values[values.length-k-1];
    values[values.length-k-1] = tmp;
}

println(values);
println(values[0]);
```

2. What does the following code print? Assume the **values** array is the same as defined in 1.

```
double mystery(double[] arr) {
    double result=1.0;
    for (int i=0; i<arr.length; i++) {
        result *= arr[i];
    }
    return result;
}

println(mystery(values));
```

3. What does the following code print?

```
void mystery(int[] arr) {
    if (arr.length > 0) {
        arr[0] = 0;
    }
    if (arr.length > 1) {
        arr[1] = 1;
    }
    for (int i=2; i < arr.length; ++i) {
        arr[i] = arr[i - 1] + arr[i - 2];
    }
}

int[] numbers = new int[10];
mystery(numbers);
println(numbers);
```

4. Describe what the value of variable `c` will reflect after the execution of the nested for loop?

```
int c=0;

for (int i=0; i<data.length; i++) {
    for (int j=0; j<data.length; j++) {
        if (data[i] == data[j] && i!=j) {
            c++;
        }
    }
}
```

