Array Lab

1. What does the following code print?

```
float[] 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++) {
  float 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.

```
float mystery(float[] arr) {
  float 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 mystery2(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];
mystery2(numbers);
println(numbers);
```

4. Describe what the value of variable **c** will reflect after the execution of the nested for loop? Note that it is indeed true that you don't know the exact contents (or even type) of the array **data**. However, that shouldn't affect your answer.

```
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++;
    }
  }
}
```

5. Write a function **void fill(int arr[], int n)** that takes an integer array **arr** and copies **n** to each element in the array.

6. Write a function **int findMin(int arr[])** that takes an integer array **arr** as a parameter and returns the smallest integer in the array.

7. Write a function **int sumAlternate(int arr[])** that takes an integer array **arr** and returns the sum of every other integer in the array, starting with the first. For example, if the array contains these values: **{0, 1, 2, 3, 4, 5, 6, 7},** the return value would be 12.