Part 3:

1. Consider the declaration in SumAllArr.java: **int[]** arr1 = **new int**[max + 1];
   1. How many array elements does this statement create?
      1. *There are max + 1 elements*
   2. Why do we have **max + 1**?
      1. *So it can be one more because the default starts at 0*
   3. Can we just use max and have the program still work correctly?
      1. *No because the element will be different, out of bound error.*
2. Before the while-loop in SumAllArr.java we have i = 1.
   1. Why is it there?
      1. *The i = 1 is there because the variable “i” can restart to the begin of the array (restart count).*
   2. Can we use another variable instead?
      1. *Yes, you can use another variable like “j” or “count”*
3. The do-while loop in SumAllArr.java is implemented using (++i <= max).
   1. Provide an alternative expression that implements the same logic.
      1. i < max
   2. What will (i++ <= max) result in?
      1. it will cause an ArrayIndexOutofBoundsException error, going up 1 more then ususally