

Exercise on Lesson 18

1. Write code that will instantiate (create) a *double* array called *sgt* having 800 elements.
2.

```
double []dfw = new double[21];
System.out.println( dfw.length ); //What is printed?
```
3. For the code in #1 above, write a *for*-loop that will cycle through all the elements of *double sgt[]* and store the square root of the index of each element in that element.
4. Assuming *rtl* is the name of an array, what's wrong with this code?

```
double rtl_len = rtl.length( );
```
5. On **one** line of code, both declare a character array called *cr* and initialize its elements to be 'a', 'b', 'c', 'd', and 'e'.
6. Refer to #5 above. What is the value of *cr.length* ?
7. Write code that will print the sum of the squares of all the elements of the *ref* integer array.
8. What's wrong with the following code?

```
for (int k = 2; k < homer.length; k++)
{
    homer[k +1] = k;
}
```
9. Fill in the blanks below to enable us to pass a *double* array called *dbx* to a method called *heroWorship*. Within the method, the array should be called *vb*.

```
boolean bbc = heroWorship(_____);

public boolean heroWorship(_____) //signature of method
```
10. Assume the five values an integer array *adc* contains are: 34, 56, -102, 18, and 5. What is the value of *adc[1]* ?
11. Using the *adc* array from #10 above, what would be the value of *adc[3] + adc[4]*?
12. Using the *adc* array from #10 above, what would be the value of *adc[5]* ?

13. Describe what the following code segment does:

```
for (int j = 0; j < b.length; j++)
    b[j] = Math.abs( b[j] );
```

14. For the *int* array $c = \{1, 2, 3, 4\}$, what would be the output of the following code?

```
String ss = ">>>";
int len = ss.length( );
for (int j = 0; j < len; j++)
    ss+= c[j];
System.out.println(ss);
```

15. Write a loop that locates the first occurrence of a negative integer in an array, *pg*. When the loop is finished, the variable *indx* should contain the index of the negative number, or the length of the array if there were no negative numbers in the array.

```
16. String wc = "Whooping crane";
String sp[] = wc.split("oo");
for(int j = 0; j < sp.length; j++)
{
    System.out.println(sp[j]);
}
```

17. List the elements of $String []sArray = "fee \quad fi \quad fo ".split("\\s+");$.

18. List the elements of $String []sp = "One two".split("Q");$.

19. Using the *split* method, write code that will count all of the occurrences of "th" (without regard to upper or lower case) in "The best THERE is is Barth".

Project... Array of Hope

This project called *ArrayOfHope* will consist of just one class, *Tester*, that in turn, has just one method, *main*. The *main* method will use two *for*-loops:

- The first loop will produce an integer count from 65 to 90 (notice these are the ASCII codes for characters A...Z) and initialize the elements of the character array *ch[]* with the characters corresponding to the ASCII codes being generated by the loop. This will fill the *ch[]* array as follows: $ch[0] = 'A', ch[1] = 'B', \dots, ch[25] = 'Z'$.
- The second loop will print the 26 elements of the *ch[]* array with one comma followed by one space between adjacent characters as follows:

A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z