**1.** Consider the assignment that goes with this lesson and its algorithm for finding a gene with stop codon TAA. **1 / 1 point**

Consider the following DNA string.

- “AAATGCCCTAACTAGATTAAGAAACC”

Which one of the following is the gene returned using that algorithm?

- ○ The empty string.
- ○ ATGCCCTAACTAGATTAA
- ◉ ATGCCCTAA

  Note: This is the correct answer.
- ○ ATGCCC
- ○ CCC

✓ **Correct**
Correct!

**2.** Which one of the following replaces the String variable dna with the lowercase version of this string? **1 / 1 point**

○
```
1   dna = toLowerCase(dna);
```

○
```
1   dna.toLowerCase() = dna;
```

```
1    dna.toLowerCase();
```

```
1    dna = dna.toLowerCase();
```

**Correct**
Correct!

**3.** After adding two additional parameters to findSimpleGene for the startCodon and stopCodon, which of the following is another change that must be made for the program to compile? **1 / 1 point**

- Two arguments must be added to the call to findSimpleGene.
- Two return statements must be added to findSimpleGene
- Two if statements must be added to testSimpleGene
- Two if statements must be added to findSimpleGene.

**Correct**
Correct!

**4.** Suppose that stringa is in stringb at position pos. Which one of the following returns the part of stringb that comes after stringa in the method lastPart? **1 / 1 point**

```
1    return stringb.substring(pos+stringa.length());
```

```
return stringb.substring(pos);
```

```
return stringb.substring(pos, stringa.length());
```

```
return stringb - stringa;
```

**Correct**
Correct!

**5.** In the method twoOccurrences, suppose pos is the value of the first occurrence of stringa when stringa is found. Which of the following lines of code assigns pos2 to the second occurrence of stringa if there is a second occurrence?

**1 / 1 point**

```
pos2 = stringb.indexOf(stringa, pos+1);
```

```
1   pos2 = stringb.indexOf(stringa);
```

```
1   pos2 = stringb.indexOf(stringa, pos);
```

```
1   pos2 = indexOf(stringb, stringa, pos);
```

**Correct**

Correct!

**6.** Consider assignment 2 for this lesson. Consider the code to find and print all the YouTube URL links. **1 / 1 point**

```
URLResource file = new  URLResource("http://someURL");
    for (String item : file.words()) {
           String itemLower = item.toLowerCase();
           int pos = itemLower.indexOf("youtube.com");
           if (pos != -1) {
            MISSING CODE
               }
    }
```

Which one of the following is the missing code to find and print all the YouTube URLs?

- (●)
```
int beg = item.lastIndexOf("\"",pos);
int end = item.indexOf("\"", pos+1);
System.out.println(item.substring(beg+1,end));
```

- ( )
```
indexOf("\"",pos-9);
int end = item.indexOf("\"", pos+1);
System.out.println(item.substring(beg+1,end));
```

- ( )
```
int beg = itemLower.lastIndexOf("\"",pos);
int end = itemLower.indexOf("\"", pos+1);
System.out.println(itemLower.substring(beg+1,end));
```

- ( )
```
int beg = item.indexOf("\"", pos-6);
int end = item.lastIndexOf("\"", pos+1);
System.out.println(item.substring(beg+1,end));
```

```
1   int beg = item.lastIndexOf("\"");
2   int end = item.lastIndexOf("\"", pos+1);
3   System.out.println(item.substring(beg+1,end));
```

```
1   int beg = itemLower.indexOf("\"",pos-9);
2   int end = itemLower.indexOf("\"", pos+1);
3   System.out.println(itemLower.substring(beg+1,end));
```

**Correct**

Correct!