



AP[®] Computer Science A 2004 Sample Student Responses

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A1 A,

Complete method numWordsOfLength below.

```
// postcondition: returns the number of words in this WordList that  
// are exactly len letters long  
public int numWordsOfLength(int len) {
```

```
    int count = 0;  
    for (int i = 0; i < myList.size(); i++)
```

```
    {  
        if (((String)myList.get(i)).length == len)
```

```
            count++;
```

```
    }
```

```
}
```

```
}
```

Part (b) begins on page 6.

GO ON TO THE NEXT PAGE.

A₂

Complete method `removeWordsOfLength` below.

```
// postcondition: all words that are exactly len letters long
//                have been removed from this WordList, with the
//                order of the remaining words unchanged
public void removeWordsOfLength(int len) {
```

```
    for(int i = 0; i < myList.size(); i++)
```

```
    {
        if((String) myList.get(i) == len)
```

```
        {
            myList.remove(i);
            i--;
```

```
        }
```

```
    }
```

GO ON TO THE NEXT PAGE.

Complete method numWordsOfLength below.

A1 B1

```
// postcondition: returns the number of words in this WordList that
// are exactly len letters long
public int numWordsOfLength(int len)
{
    int c = 0;
    for (int i = 0; i < myList.Length(); i++)
    {
        if ((myList[i].length()).equals(len))
            c++;
    }
    return c;
}
```

Part (b) begins on page 6.

GO ON TO THE NEXT PAGE.

Complete method `removeWordsOfLength` below.

```
// postcondition: all words that are exactly len letters long
//                have been removed from this WordList, with the
//                order of the remaining words unchanged
public void removeWordsOfLength(int len)
{
    int c=0;
    for (int i=0; i < myList.length; i++)
    {
        if (myList[i].length().equals(len))
            myList.remove(i)
    }
}
```

GO ON TO THE NEXT PAGE.

A1 C1

Complete method `removeWordsOfLength` below.

```
// postcondition: all words that are exactly len letters long
//                have been removed from this WordList, with the
//                order of the remaining words unchanged
public void removeWordsOfLength(int len)
```

```
for (int k=0; k<= mylist.length; k++) {
    if (len == mylist[k].length) {
        mylist.set(k, "");
    }
    k++;
}
System.out.println(mylist)
```

GO ON TO THE NEXT PAGE.

C2

Complete method numWordsOfLength below.

```
// postcondition: returns the number of words in this WordList that
//                are exactly len letters long
public int numWordsOfLength(int len)
    int count;
    for (int k=0; k <= lenmylist.length; k++) {
        if (k = mylist[k].length) {
            count = count + 1; }
    k++; }
    System.out.println ("The total amount of words that have " + len + " letters is " +
                        (count));
```

Part (b) begins on page 6.

GO ON TO THE NEXT PAGE.