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Section 5, Problem 18

```
1 #include <iostream>
2 #include <stdlib.h>
3
4 using namespace std;
5
6 int main(){
7
8     for(int i = 0; i < 1000; i++){
9         if (i % 3 == 0){
10             cout << "Buzz" << endl;
11         } else if (i % 5 == 0){
12             cout << "Fizz" << endl;
13         } else if (i % 3 == 0 && i % 5 == 0){
14             cout << "FizzBuzz" << endl;
15         } else {
16             cout << i << endl;
17         }
18     }
19
20     return 0;
21 }
```

Section 5, Problem 25

```
1 #include <iostream>
2 #include <stdlib.h>
3
4 using namespace std;
5
6 int main(){
7
8     bool success = false;
9     int entry;
10
11    while( !sucess ){
12        cout << "Enter an integer "Enter an integer (but if it's not between 1
13            and 100, I'll just ask again): ";
14        cin >> entry;
15
16        if(entry > 1 && entry < 100){
17            sucess = true;
18        }
19
20    }
21 }
```

## Section 5, Problem 29

```
1 #include <iostream>
2 #include <stdlib.h>
3
4 using namespace std;
5
6 int main(){
7
8     int x = 1;
9     while(x < 5){
10
11         for(int i = 1; i <= x; i++){
12             cout << i;
13             x+=i;
14             break;
15         }
16         cout << ", ";
17     }
18     return 0;
19 } //prints out: 1, 1, 1, 1,
```

## Section 5, Longer Problems 3

```
1 #include <iostream>
2 #include <stdlib.h>
3
4 using namespace std;
5
6 int main(){
7     int nums [9]; //array that holds 10 integers
8     cout << "Input 10 integers (separated by spaces, then press Enter): ";
9     for(int i = 0; i < 10; i++){
10         cin >> nums[i];
11     }
12
13     for(int j = 1; j < 10; j++){ //bubble sort algorithm
14         for(int k = 0; k < 9; k++){
15             if(nums[k] > nums[k+1]){
16                 int temp;
17                 temp = nums[k];
18                 nums[k] = nums[k+1];
19                 nums[k+1] = temp;
20             }
21         }
22     }
23
24     for(int i = 9; i >= 0; i--){ //returns the largest integer less than
25         100
26         if(nums[i] < 100 && nums[i] > nums[i-1]){
27             cout << "The largest number less than 100 is: " << nums[i] << " ";
28             break;
29         }
30     }
```

```
31     return 0;
32 }
```

### Section 6, Problem 14

```
1 int blah(int &a, int b){
2     a++;
3     b++;
4     return a+b;
5 }
6 int main(){
7     int a = 2, b = 5, c;
8     c = blah(a,b);
9     cout << a << endl;
10    cout << b << endl;
11    cout << c << endl;
12    return 0;
13 } //prints out:
14 //3
15 //5
16 //9
```

### Section 6, Problem 18

```
1 void replaceMax(int a, int b){
2     if(a > b){
3         b = a;
4     } else if (b > a){
5         a = b;
6     }
7 }
```

### Section 6, Problem 25

```
1 #include <iostream>
2
3 using namespace std;
4
5 int x = 10;
6 int fn(int x){
7
8     int y = 2;
9     x = y;
10
11     return x+y;
12 }
13
14 int main(){
15
16     cout << x << endl;
17     int x = 5, y = 3;
18     y = fn(::x);
19     cout << x << y << endl;
20
21     return 0;
22 }
```

```
22 } //print outs out:  
23 //10  
24 //54
```

## Section 6, Longer Problem 2

```
1 //Resources used: http://stackoverflow.com/questions/16029324/c-splitting-  
2 //a-string-into-an-array  
3  
4 #include <iostream>  
5 #include <stdlib.h>  
6 #include <fstream>  
7 #include <iomanip>  
8 #include <sstream>  
9  
10 using namespace std;  
11  
12 void newWord(string s){  
13     if(s == "Hillary" || s == "Donald"){  
14         s = "***";  
15     }  
16     cout << s << " ";  
17 }  
18  
19 int main(){  
20  
21     string line;  
22     int num = 10000;  
23     string arr[10000]; //an arbitrarily large array (assuming that the  
24         largest sentence is 10000 words)  
25     string word;  
26  
27     ifstream file("news.txt");  
28     if(file.is_open()) {  
29         while(getline (file, line) ){  
30             stringstream ssin(line);  
31             for(int i = 0; ssin.good() && i < num; i++){ //splits sentence  
32                 into individual words  
33                 ssin >> arr[i]; //puts the words in an array, arr  
34                 newWord(arr[i]); //turns the word into "***", if it's "Hillary"  
35                     or "Donald"  
36             }  
37         }  
38     }  
39     return 0;  
40 }
```