

```
1. /*
2.  * count.c
3.  *
4.  * week 2 section
5.  * fall 2013
6.  *
7.  * practice with arrays
8.  */
9.
10. #include <cs50.h>
11. #include <stdio.h>
12.
13. int main(void)
14. {
15.     // create an array with the integers 1 through 5
16.     int numbers[5] = {1, 2, 3, 4, 5};
17.
18.     // print out each integer on a new line
19.     for (int i = 0; i < 5; i++)
20.     {
21.         printf("%d\n", numbers[i]);
22.     }
23. }
```

```
1. /*
2.  * function.c
3. *
4.  * week 2 section
5.  * fall 2013
6. *
7.  * practice with functions
8. */
9.
10. #include <cs50.h>
11. #include <stdio.h>
12.
13. // function declaration
14. void HelloWorld(void);
15.
16. int main(void)
17. {
18.     // call another function
19.     HelloWorld();
20. }
21.
22. void HelloWorld(void)
23. {
24.     // print out a greeting to the user
25.     printf("ohai, world!\n");
26. }
```

```
1. /*
2.  * personalized.c
3.  *
4.  * week 2 section
5.  * fall 2013
6.  *
7.  * practice with handling command-line arguments
8.  */
9.
10. #include <cs50.h>
11. #include <stdio.h>
12.
13. // take a user's full name via the command-line
14. int main(int argc, string argv[])
15. {
16.     // two and only two words
17.     if (argc != 3)
18.     {
19.         printf("usage: ./personalized first last\n");
20.         return 1;
21.     }
22.
23.     // print out a greeting to the user that includes their first name
24.     printf("ohai, %s!\n", argv[1]);
25. }
```

```
1. /*
2. * spell.c
3. *
4. * week 2 section
5. * fall 2013
6. *
7. * practice with strings as arrays
8. */
9.
10. #include <cs50.h>
11. #include <stdio.h>
12. #include <string.h>
13.
14. int main(void)
15. {
16.     // ask the user for a string
17.     printf("String: ");
18.     string str = GetString();
19.
20.     // print out each character on a new line
21.     for (int i = 0, length = strlen(str); i < length; i++)
22.     {
23.         printf("%c\n", str[i]);
24.     }
25. }
```

```
1. /*
2.  * students.c
3.  *
4.  * week 2 section
5.  * fall 2013
6.  *
7.  * practice with arrays, rand(), and modulo
8.  */
9.
10. #include <cs50.h>
11. #include <stdio.h>
12. #include <stdlib.h>
13. #include <time.h>
14.
15. #define NUMBER 5
16.
17. int main(void)
18. {
19.     // ask the user for fives names
20.     string names[NUMBER];
21.     for (int i = 0; i < NUMBER; i++)
22.     {
23.         printf("Student %d: ", i + 1);
24.         names[i] = GetString();
25.     }
26.
27.     // randomly choose and print out one of the names
28.     srand(time(NULL));
29.     int name = rand() % NUMBER;
30.     printf("Chosen student: %s\n", names[name]);
31. }
```