

1. Write a program that prints the following text at the terminal. a. In C, lowercase letters are significant. b. main is where program execution begins. c. Opening and closing braces enclose program statements in a routine. d. All program statements must be terminated by a semicolon.

```
C assignment_lec1_c1.c 2, U • C assignment_lec1_c2.c 2, U • C assignment_lec4_c4.c 2, U •
C: > Users > Jeff Rouzel > Downloads > Academics > CMSC21 > Lecture 1 > C assignment_lec1_c1.c > ...
1  #include <stdio.h>
2
3  int main(void)
4  {
5      printf ("a.");
6      printf (" In C, lowercase letters are significant.\n");
7      printf ("b.");
8      printf (" main is where program execution begins.\n");
9      printf ("c.");
10     printf (" Opening and closing braces enclose program statements in a routine.\n");
11     printf ("d.");
12     printf (" All program statements must be terminated by a semicolon.\n");
13 }
14
```

2. What output would you expect from the following program?

Output would be:

Testing.....1...2..3

```
#include <stdio.h>

int main (void)

{

    printf ("Testing...");

    printf ("....1");

    printf ("...2");

    printf ("..3");

    printf ("\n");

    return 0;

}
```

3. . Write a program that subtracts the value 15 from 87 and displays the result, together with an appropriate message, at the terminal.

```
C assignment_lec1_c1.c 2, U • C assignment_lec1_c2.c 2, U • C assignment_lec4_c4.c 2, U •
C: > Users > Jeff Rouzel > Downloads > Academics > CMSC21 > Lecture 1 > C assignment_lec1_c2.c > main(void)
1  #include <stdio.h>
2
3  int main(void)
4  {
5      int num1, num2, diff;
6
7      num1 = 15;
8      num2 = 87;
9
10     diff = num1 - num2;
11
12     printf("The difference of 15 and 87 is %d",diff);
13 }
```

4. Identify the syntactic errors in the following program. Then type in and run the corrected program to ensure you have correctly identified all the mistakes.

```
terminal Help • assignment_lec4_c4.c - Visual Studio Code
C assignment_lec1_c1.c 2, U • C assignment_lec1_c2.c 2, U • C assignment_lec4_c4.c 2, U •
C: > Users > Jeff Rouzel > Downloads > Academics > CMSC21 > Lecture 1 > C assignment_lec4_c4.c > ...
1  #include <stdio.h>
2  int main(void) // Void is replaced with void
3  {
4      int sum; // INT is replaced with int
5
6      // COMPUTE RESULT
7      sum = 25 + 37 - 19; // added ";" at the end
8
9      // DISPLAY RESULT
10
11     printf("The answer is %i\n", sum); // added "," after the string to set the variable sum
12
13     return 0;
14 }
15
16
17
```

```
#include <stdio.h>

int main(Void)

INT sum;

/* COMPUTE RESULT

sum = 25 + 37 - 19

/* DISPLAY RESULTS //

printf ("The answer is %i\n" sum);

return 0;
```

5. What output might you expect from the following program?

Output would be:

main.c:5:14: error: expected ';' before 'result'

```
#include <stdio.h>

int main (void)
{
    int answer, result;

    answer = 100.

    result = answer - 10;

    printf ("The result is %i\n", result +
5);

    return 0;

}
```