

Basic Syntax in C  
Lecture 1 Assignments

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.

```
CMSC 21 > CMSC 21 > Lecture1 > C assignment_lec1_c1.c > ...
1  #include <stdio.h>
2  int main (void) {
3
4      printf ("In C, lowercase letters are significant.\n");
5      printf ("main is where program execution begins.\n");
6      printf ("Opening and closing braces enclose program statements in a routine.\n");
7      printf ("All program statements must be terminated by a semicolon.\n");
8
9      return 0;
10 }
```

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

```
#include <stdio.h>
int main (void){
    printf ("Testing...");
    printf ("....1");
    printf ("...2");
    printf ("..3");
    printf ("\n");
    return 0;
}
```

**The output would be:**

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

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

```
CMSC 21 > CMSC 21 > Lecture1 > C assignment_lec1_c2.c > main(void)
1  #include <stdio.h>
2      int main (void){
3
4          int x,y,z;
5          x=15;
6          y=87;
7          z=y-x;
8
9          printf("%d subtracted from %d is equal to %d.", x, y, z);
10
11         return 0;
12     }
```

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.

```
#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;
}
```

```
CMSC 21 > CMSC 21 > Lecture1 > C assignment_lec4_c4.c > main(Void)
1  #include <stdio.h>
2
3      int main(Void) {
4
5          int sum;
6          /* COMPUTE RESULT */
7          sum = 25 + 37 - 19;
8          /* DISPLAY RESULTS */
9          printf("The answer is %i\n", sum);
10
11         return 0;
12     }
```

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

```
#include <stdio.h>
int main (void){
    int answer, result;
    answer = 100.
    result = answer - 10;
    printf ("The result is %i\n", result + 5);
    return 0;
}
```

**The result would be an error since line 4 ended with period (.) instead of a semi-colon.**

```
#include <stdio.h>
int main (void){
    int answer, result;
    answer = 100.
    result = answer - 10;
    printf ("The result is %i\n", result + 5);
    return 0;
}
```