

Basic Syntax in C Lecture 1 Assignments

1.

```
1  /** CELIS, KRISTINA | ASSIGNMENT 1 | lec1_c1 */
2
3  #include <stdio.h>
4
5  int main(void)
6  {
7      /* the printf() function will print/display the ff statements in the terminal
8       | or output screen. '\n' is used to insert a new line for every printf statement. */
9      printf("a. In C, lowercase letters are significant.\n");
10     printf("b. main is where program execution begins.\n");
11     printf("c. Opening and closing braces enclose program statements in a routine.\n");
12     printf("d. All program statements must be terminated by a semicolon.\n");
13
14     return 0;
15 }
```

```
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.
PS C:\Users\Kristina\Desktop\ACADS\CMSC 21\source codes>
```

2. The expected output is: **Testing.....1...2..3**

3.

```
1  /** CELIS, KRISTINA | ASSIGNMENT 1 | lec1_c2 */
2
3  #include <stdio.h>
4
5  int main(void)
6  {
7
8      int minuend, subtrahend, difference;    // Declaring variables as integers
9
10     minuend = 87;                          // Assigning the values to the variables declared
11     subtrahend = 15;
12     difference = minuend - subtrahend;      // Formula for subtracting
13
14     // the statement below will print the output (message, integers and difference) in the terminal.
15     printf("Subtracting %d from %d is equal to a difference of %d\n", subtrahend, minuend, difference);
16
17     return 0;
18 }
```

```
Subtracting 15 from 87 is equal to a difference of 72
PS C:\Users\Kristina\Desktop\ACADS\CMSC 21\source codes>
```

4. Identify the syntactic errors in the following program.

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

Line 2: int main(Void)

- V should not be capitalized
- Lacks an open bracket { after it

Line 3: INT sum;

- INT should not be capitalized

Line 4: /* COMPUTE RESULT

- Comment was not closed. Lacks */

Line 5: sum = 25 + 37 - 19

- Statement should be terminated by a semicolon (;)

Line 6: /* DISPLAY RESULTS //

- Comment was not closed. Should be */ in the end

Line 7: printf ("The answer is %i\n" sum);

- There should be a comma (,) before the sum variable

Then type in and run the corrected program to ensure you have correctly identified all the mistakes.

```
1  /** CELIS, KRISTINA | ASSIGNMENT 1 | lec1_c4 **/
2
3  #include <stdio.h>
4
5  int main(void)
6  {
7      int sum;
8      /* COMPUTE RESULT */
9      sum = 25 + 37 - 19;
10     /* DISPLAY RESULTS */
11     printf ("The answer is %i\n", sum);
12     return 0;
13 }
```

The answer is 43

PS C:\Users\Kristina\Desktop\ACADS\CMSC 21\source codes>

5. An error will occur with the program due to the line “answer = 100.”

Solution: This should be terminated by a semicolon (;) instead of a period.