COS 135 Individual Assignment Week 2

Due: Friday 02/08/19 End of the day
This assignment has 2 sections (part #1 and part #2) in 4 pages. Please submit a .zip file with answers for MCQs (see MCQ template attached) and source code/s.

Part #1 (60pts) MCQ: Select the most appropriate answer.

1. What is the purpose of comments in a computer program?

a. They help the compiler understand the code.
b. They help the CPU understand the code.
c. They help a human reading the comment understand the code.
d. none of the above

2. Which of the following is a legal identifier?

a. 3_points
b. fieldGoal%
c. three points
d. three_points

3. Which of the following is not a valid C statement?

a. printf("Hello");
b. printf('H');
c. printf("\"Hello\"");
d. printf('Hello');

4. Which of the following is not a keyword in C?

a. void
b. while
c. else
d. repeat

5. Every C program must have a main() function.

a. True
b. False

6. Which of the following is not a valid C variable name?

a. int number;
b. float rate;
c. int variable_count;
d. int $main;

7. Library function putchar() belongs to which header file?

a. stdio.h
b. conio.h
c. stdlib.h
d. stdlibio.h

8. Which of the following is not a command in Linux shell / terminal?

a. ls
b. pwd
c. mkfolder
d. man

9. Functions can be declared (or implemented) inside the main() function.

a. True
b. False

10. C programs can be compiled and executed in

a. Windows only
b. Mac OS X only
c. Linux only
d. Any of the above (Windows, Mac OS X, or Linux)

11. A local variable can be accessed from any function in a C program.

a. True
b. False

12. Global variables are defined inside the main() function.

a. True
b. False

13. A variable in a C program has a _____

a. name
b. address
c. data type
d. all of the above

14. Following program outputs:

const double PI = 3.14;
PI = 2.9;
printf("PI: %f", PI);

a. PI: 2.9
b. PI: 3.14
c. PI: 6.04
d. An error in the code

15. Following printf() statement outputs:

printf("Hello\rHi\bA\n");

a. HelloHiA
b. HelloHA
c. HAllo
d. HellHA

Part #2 (40pts): write C programs for following tasks and submit your source code/s

(a) Write a C program to output following table into the console / terminal. Refer to sample codes uploaded in Blackboard for more formatting options.

```
Name            Age            Country
--------------------------------------------------
Peter           23             USA
Manuel          43             Germany
Ken             35             China
Moz             54             Ghana
```

(b) Use a suitable format specifier to complete the following code.

```c
#include <stdio.h>
int main()
{
    char chr = 67;
    printf("Character having ASCII value 67 is ___.\n", chr);
    return 0;
}
```

(c) Complete the printf() function with suitable format specifiers to output the data in variables.

```c
#include<stdio.h>

int main()
{
    int i_number = 12;
    float f_number = 3.125;
    double d_number = 7.5345345;
    char character = 'T';
    char text[] = "COS 135";

    printf("_____"_____);
}
```