Programming with C

Assignment 3

Due: Next Section.

Notes: This assignment is individual assignment, every student should complete it by himself.

---

1. (5 points**) True or False:**

a. If you didn't initialize a constant the compiler will generate a syntax error.

b. Constants defined with (#define) are not stored in the program memory.

c. If you forget to initialize a double variable the compiler will initialize it with zero.

d. You can initialize a variable without declaration.

e. The (+) operator has a higher priority than (*) operator.

2. (5 Points**) Run the following program on your machine then answer the questions.**

```
#include <iostream>
using namespace std;
int main (){
        int x=4,m;
        double y=6;
        double z=2;
        const int n=4;

        cout<<y+3/2*z;

        m=y/x;
        cout<<m;

        int g;
        cout<<g;

return 0;
}
```

a. What is the output of line 9?
b. Rewrite line 9 with practice to be more clear.
c. What is the output of line 12? Is it correct? Why?
d. What is the output of line 15? Is it correct? Why?
e. Replace line 7 with "cons tint n;" What would happen if you compiled the program after this modification?
f. Suggest a better method to declare "n" instead of line 7. And state why it's better?

3. (5 Points**) write a C program to prompt for and input the weather temperature in Celsius, and output it in Fahrenheit with formula F=C*(9/5)+32. The program results should look as following**

Enter the temperature in Celsius: 30 The temperature in Fahrenheit= 86