

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.

1.	#include <iostream>	12.	cout<<m;
2.	using namespace std;	13.	
3.	int main () {	14.	int g;
4.	int x=4,m;	15.	cout<<g;
5.	double y=6;	16.	
6.	double z=2;	17.	return 0;
7.	const int n=4;	18.	}
8.		19.	
9.	cout<<y+3/2*z;	20.	
10.		21.	
11.	m=y/x;	22.	

- 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