Physics 2G03 – Homework 2

* 1. **The *main()* function**

int main() {

return 0;

}

*When removing the semi-colon after* ***return****, the error I get is:*

marcantony.cpp: In function ‘int main()’:

marcantony.cpp:13:1: error: expected ‘;’ before ‘}’ token

}

^

* 1. **Including Input and Output**

#include <iostream>

int main() {

return 0;

}

* 1. **Writing to the terminal**

#include <iostream>

int main() {

std::cout << "Friends, Romans, countrymen, lend me your ears\n";

return 0;

}

#include <iostream>

using namespace std;

int main() {

cout << "Friends, Romans, countrymen, lend me your ears\n";

return 0;

}

*After removing the* ***using******namespace*** *declaration, the error I get is:*

marcantony.cpp: In function ‘int main()’:

marcantony.cpp:5:5: error: ‘cout’ was not declared in this scope

cout << "Friends, Romans, countrymen, lend me your ears\n";

^

marcantony.cpp:5:5: note: suggested alternative:

In file included from marcantony.cpp:1:0:

/usr/include/c++/4.8.2/iostream:61:18: note: ‘std::cout’

extern ostream cout; /// Linked to standard output

**2.0) Variables**

int main() {

int a = 5; // an integer

double pi = 3.14; // a real number

return 0;

}

*After removing the* ***int*** *specifier, the error I get is:*

sum.cpp: In function ‘int main()’:

sum.cpp:4:5: error: ‘a’ was not declared in this scope

a = 5; // an integer

^

#include <iostream>

#include <string>

using namespace std;

int main() {

// a string of letters

string greeting = "Friends, Romans, countrymen, lend me your ears!!\n";

cout << greeting;

return 0;

}

**3.0) Reading from the terminal**

#include <iostream>

using namespace std;

int main() {

int a, b;

cout << "Please give me two integers.\n";

cin >> a;

cin >> b;

cout << "Your sum is: " << '\t' << a+b << endl;

return 0;

}

If the user tries to input the numbers 1.3 and 3.6, the program stops at the first input, skips the second, and the final output is:

*Your sum is: 1*

**Exercises**

**1.**

#include <iostream>

#include <string>

using namespace std;

int main() {

int a, b, c;

string prompt = "Please give me ";

cout << '\n' << prompt << "an integer: ";

cin >> a;

cout << prompt << "a second integer: ";

cin >> b;

cout << prompt << "another integer: ";

cin >> c;

cout << "\nThe sum is: " << (a + b + c) << endl;

cout << "The product is: " << (a \* b \* c) << '\n' << endl;

return 0;

}

#include <iostream>

#include <string>

using namespace std;

int main() {

string word\_1, word\_2, concat = "", prompt = "Please give me a";

cout << "\n" << prompt << " word: ";

cin >> word\_1;

cout << prompt << "nother word: ";

cin >> word\_2;

concat = word\_1 + word\_2;

cout << "\n" << concat << "\n";

//cout << "\nYou said '" << concat << "'\n" << endl;

return 0;

}