

Activity No. 1.3

Writing First Program Using C++ Language

Course Code: CPE007	Program: Computer Engineering
Course Title: Programming Logic and Design	Date Performed: 8/29/2025
Section: CPE11S1	Date Submitted: 9/1/2025
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6. Output

Exercise 4.1

main.cpp		Run	Output
<pre>1 //This outputs my name, course and section. 2 #include <iostream> 3 4 int main() 5 { 6 std::cout<<"Nathaniel Borja Mendoza"<<std::endl; 7 std::cout<<"CPE007"<<std::endl; 8 std::cout<<"CPE11S1"<<std::endl; 9 }</pre>		<pre>Nathaniel Borja Mendoza CPE007 CPE11S1 ==== Code Execution Successful ====</pre>	

Exercise 4.2

main.cpp		Run	Output
<pre>1 //This outputs my name, course and section. 2 #include <iostream> 3 4 int main() 5 { 6 std::cout<<"Nathaniel Borja Mendoza"<<std::endl; 7 std::cout<<"Nathaniel Borja Mendoza"<<std::endl; 8 std::cout<<"Nathaniel Borja Mendoza"; 9 }</pre>		<pre>Nathaniel Borja Mendoza Nathaniel Borja Mendoza Nathaniel Borja Mendoza ==== Code Execution Successful ====</pre>	

7. Supplementary Activity

1. Given Code and Output

main.cpp		Run	Output
<pre>1 #include <iostream> 2 3 int main() 4 { 5 cout("The value of five is:"<<5int); 6 return 0; 7 }</pre>		<pre>ERROR! /tmp/Y8lFTKGvuB/main.cpp: In function 'int main()': /tmp/Y8lFTKGvuB/main.cpp:5:31: error: unable to find numeric literal operator 'operator'"int' 5 cout("The value of five is:"<<5int); ^~~~ In file included from /tmp/Y8lFTKGvuB/main.cpp:1: /usr/local/include/c++/14.2.0/iostream:63:18: note: 'std::cout' declared here 63 extern ostream cout; //=< Linked to standard output ^~~~ ==== Code Exited With Errors ====</pre>	<input type="button" value="Clear"/>

Errors:

1. Line 2 is missing “using namespace std”. Or did not use it and still proceeds to write without “std::” after cout.
2. Line 5 used invalid use of parenthesis “()” with cout.
3. Line 5 invalid 5int. Must be after “{“ and do int five = 5 or int x = 5, number works as well.
4. Line 5 did not use “<<” after cout. Also missing cout before semicolon.
5. Did not use the end line or \n for code clarity. Optional in this situation but better to be included.

Correct Code and Output

main.cpp				Run	Output
1 #include <iostream> 2 int main() 3 { 4 int five = 5; 5 std::cout<<"The value of five is :"<<five<<std::endl; 6 return 0; 7 }					The value of five is :5 ==== Code Execution Successful ===

2. Given Code and Output

main.cpp				Run	Output	Clear
1 int main() 2 { 3 cout<<"The value of six is:"<<16-0-10; 4 return 0; 5 }					ERROR! /tmp/14WGD7oz6G/main.cpp: In function 'int main()': /tmp/14WGD7oz6G/main.cpp:3: error: 'cout' was not declared in this scope 3 cout<<"The value of six is:"<<16-0-10; ^~~~ ==== Code Exited With Errors ===	

Errors:

1. Missing “#include <iostream>
2. Missing “using namespace std”. Or did not use it and still proceeds to write without “std::” after cout.
3. Line 3 wrong use of Arithmetic Operations and use of integers. If the expected value is “6” then, it must be (16 - 10) or 16 is subtracted by 10 will equal to 6. Therefore to conclude a logical error.

Correct Code and Output

main.cpp				Run	Output
1 #include <iostream> 2 int main() 3 { 4 std::cout << "The value of six is: " << (16 - 10) << std::endl; 5 return 0; 6 }					The value of six is: 6 ==== Code Execution Successful ===

3. Given Code and Output

main.cpp				Run	Output	Clear
1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int simpleVariable = 10; 7 cout<<"The value of ten is:"<<otherVariable; 8 return 0; 9 }					ERROR! /tmp/dagCH5aIrk/main.cpp: In function 'int main()': /tmp/dagCH5aIrk/main.cpp:7:31: error: 'otherVariable' was not declared in this scope 7 cout<<"The value of ten is:"<<otherVariable; ^~~~~~ ==== Code Exited With Errors ===	

Errors:

1. Line 7 used “otherVariable” instead of “simpleVariable”.

Correct Code and Output

main.cpp				Run	Output
1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int simpleVariable = 10; 7 cout<<"The value of ten is:"<<simpleVariable; 8 return 0; 9 }					The value of ten is:10 == Code Execution Successful ==

4. Given Code and Output

main.cpp				Run	Output
1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int 60seconds = 60; 7 int 60minutes = 50; 8 cout<<"One hour is "<<60seconds * 60minutes; 9 return 0; 10 } 11 12					ERROR! /tmp/6Tw8ptCOpF/main.cpp: In function 'int main()': /tmp/6Tw8ptCOpF/main.cpp:6:5: error: expected unqualified-id before numeric constant 6 int 60seconds = 60; ^~~~~~ /tmp/6Tw8ptCOpF/main.cpp:7:5: error: expected unqualified-id before numeric constant 7 int 60minutes = 50; ^~~~~~ ERROR! /tmp/6Tw8ptCOpF/main.cpp:8:23: error: unable to find numeric literal operator 'operator""seconds' 8 cout<<"One hour is "<<60seconds * 60minutes; ^~~~~~ /tmp/6Tw8ptCOpF/main.cpp:8:35: error: unable to find numeric literal operator 'operator""minutes' 8 cout<<"One hour is "<<60seconds * 60minutes; ^~~~~~ == Code Exited With Errors ==

Errors:

1. Line 6 and 7 variables cannot start with digits. (60 seconds and 60 minutes is invalid).
2. Line 7 Logical Error since the written integer was 60minutes = 50 which is invalid.
3. Line 8 missing output of seconds. (Expected Output)
4. Line 8 incorrect use of Arithmetic Operations. Must be (seconds * minutes) without the digits.

Correct Code and Output

main.cpp				Run	Output
1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int seconds = 60; 7 int minutes = 60; 8 cout << "One hour is " << (seconds * minutes) << " seconds" << endl; 9 return 0; 10 }					One hour is 3600 seconds == Code Execution Successful ==

5. Given Code and Output

main.cpp				Run	Output	Clear
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int ip Part1 = 027; 7 int ip Part2 = 0; 8 int ip Part3 = 0; 9 int ip Part4 = 1; 10 cout<<"Localhost IP is "<< ip Part1, ip Part2, ip Part3, ip Part4; 11 }</pre>				<pre>ERROR! /tmp/6ICs8xXAvw/main.cpp: In function 'int main()': /tmp/6ICs8xXAvw/main.cpp:6:8: error: expected initializer before 'Part1' 6 int ip Part1 = 027; ^~~~~ /tmp/6ICs8xXAvw/main.cpp:7:8: error: expected initializer before 'Part2' 7 int ip Part2 = 0; ^~~~~ /tmp/6ICs8xXAvw/main.cpp:8:8: error: expected initializer before 'Part3' 8 int ip Part3 = 0; ^~~~~ /tmp/6ICs8xXAvw/main.cpp:9:8: error: expected initializer before 'Part4' 9 int ip Part4 = 1; ^~~~~ ERROR! /tmp/6ICs8xXAvw/main.cpp:10:28: error: 'ip' was not declared in this scope 10 cout<<"Localhost IP is "<< ip Part1, ip Part2, ip Part3, ip Part4; ^~~</pre>		
					==== Code Exited With Errors ===	

Errors:

1. Invalid use of variables, which is the use of spaces between variables like "ipPart 1,2,3 and 4".
2. Wrong integer "027" it will be read as octal in c++ language and be translated to 23.
Why did It become 23? $027_8 = 2 \times 8^1 + 7 \times 8^0 = 16 + 7 = 23$
3. Wrong use of cout syntax "<<". The code was written and used commas which is invalid.
4. Line 10 has space between variables, also invalid.

Correct Code and Output

main.cpp				Run	Output	Clear
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() 5 { 6 int ipPart1 = 127; 7 int ipPart2 = 0; 8 int ipPart3 = 0; 9 int ipPart4 = 1; 10 cout << "Localhost IP is " 11 << ipPart1 << "." << ipPart2 << "." << ipPart3 << "." << ipPart4 << endl; 12 return 0; 13 } 14 }</pre>					<pre>localhost IP is 127.0.0.1 ==== Code Execution Successful ===</pre>	

8. Conclusion

I was able to accomplish these tasks in a short amount of time which made me realize that I am slowly improving on coding C++ Languages slowly but progressively which is good for my learning as I cannot speed things up since it is a sign of improvement for me as a learner. Therefore I can conclude that I was able to code simple instructions of C++ instructions and debug given programs and fix it myself for it to be executable. It is a good learning for the upcoming exams as well.