

| Activity No. 1.3 | |
|--|--------------------------------------|
| Writing First Program Using C++ Language | |
| Course Code: CPE007 | Program: Computer Engineering |
| Course Title: Programming Logic and Design | Date Performed: 09/01/25 |
| Section: CPE11S1 | Date Submitted: 09/01/25 |
| Name(s): James Daniel M. Verano | Instructor: Engr. Jimlord M. Quejado |

6. Output

Exercise 1: Try to create a simple program using C++ language that outputs your whole name. Using the new line syntax, output your program and the course and section.

Source Code:

```

1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      cout << "\nJames Daniel M. Verano" << endl;
7      cout << "CPE007" << endl;
8      cout << "CPE11S1 \n";
9
10     return 0;
11 }
```

Output:

```

James Daniel M. Verano
CPE007
CPE11S1

-----
Process exited after 0.215 seconds with return value 0
Press any key to continue . . .
```

Exercise 2: Write a program in the "C++" language that prints your name 3 times. Remember to include a return statement and make proper use of the main function.

Source Code:

```

1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      cout << "\nJames Daniel M. Verano" << endl;
7      cout << "James Daniel M. Verano" << endl;
8      cout << "James Daniel M. Verano \n";
9
10     return 0;
11 }
```

Output:

```
James Daniel M. Verano
James Daniel M. Verano
James Daniel M. Verano

-----
Process exited after 0.1961 seconds with return value 0
Press any key to continue . . .
```

7. Supplementary Activity

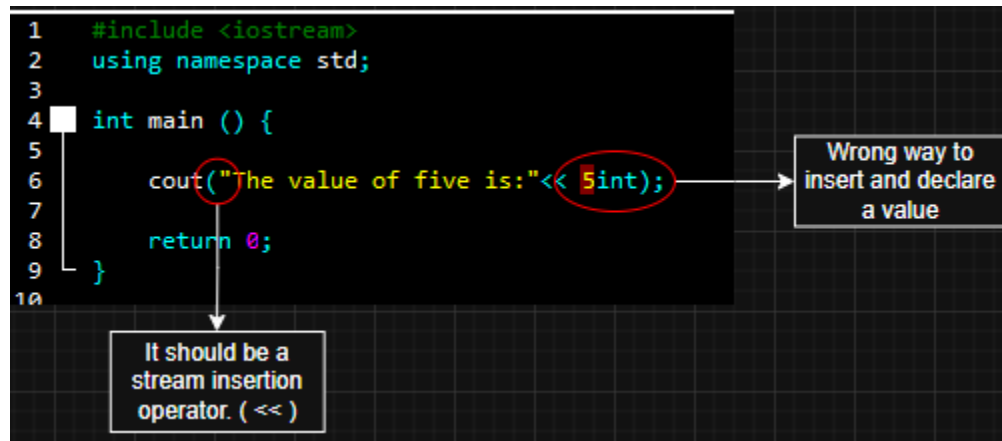
Example 1: Check the program below. Find all possible compilation errors and logic errors. Fix them. Your version of the program must print the same result as the expected output. Before you use your compiler, try to find the errors only by manual code analysis.

```
#include <iostream>
int main()
{
    cout("The value of five is:"<< 5int);
    return 0;
}
```

Example Output:

The value of five is: 5

Error Codes:



Fixed Source Code:

```
1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      int five = 5;
7
8      cout<<"The value of five is: " << five;
9
10     return 0;
11 }
```

Output:

```
The value of five is: 5
-----
Process exited after 0.1506 seconds with return value 0
Press any key to continue . . .
```

Example 2: Check the program below. Find all possible compilation errors and logic errors. Fix them. Your version of the program must print the same result as the expected output. Before you use your compiler, try to find the errors only by manual code analysis.

```
int main()
{
    cout<<"The value of six is:"<<16,0-10-;
    return 0;
}
```

Example output

The value of six is: 6

Error Codes:

```
1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      cout << "The Value of six is: "<<16,0-10-;
7
8      return 0;
9  }
```

Unexpected primary expression, unreadable arithmetic operators and numbers.

Value should only be a declared variable or desired value / expression.

Fixed Source Code:

```
1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      cout << "The Value of six is: "<< 6;
7
8      return 0;
9  }
```

Output:

```
The Value of six is: 6
-----
Process exited after 0.1467 seconds with return value 0
```

Example 3: Check the program below. Find all possible compilation errors and logic errors. Fix them. Your version of the program must print the same result as the expected output. Before you use your compiler, try to find the errors only by manual code analysis. If you want to improve the variable names, then do so, but remember that variable names have to be as descriptive as possible, and also as short as possible.

```
#include <iostream>
using namespace std;

int main()
{
    int simpleVariable = 10;
    cout<<"The value of ten is:"<<otherVariable);
    return 0;
}
```

Example output

The value of ten is: 10

Error Codes:

```
1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      int simpleVariable = 10;
7
8      cout << "The value of ten is:" << otherVariable);
9
10     return 0;
11 }
12
```

Variable is not similar.

The variable inserted was not declared or is different from the declared value.

Value should be the same declared variable, in case sensitive manner.

Fixed Source Code:

```
1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      int simpleVariable = 10;
7
8      cout << "The value of ten is: " << simpleVariable;
9
10     return 0;
11 }
12
```

Output:

```
C:\Users\lenovo\Downloads\Hands-on Activity 1.3.exe
The value of ten is: 10
-----
Process exited after 0.1587 seconds with return value 0
Press any key to continue . . .
```

Example 4: **Check the program below.** Find all possible compilation errors and logic errors. Fix them. Your version of the program must print the same result as the expected output. Before you use your compiler, try to find the errors only by manual code analysis. If you want to improve the variable names, then do so, but remember that variable names have to be as descriptive as possible, and also as short as possible.

```

#include <iostream>
using namespace std;

int main()
{
int 60seconds = 60;
int 60minutes = 50;
cout<<"One hour is "<<60seconds * 60minutes);
return 0;
}

```

Example output

One hour is 3600 seconds

Error Codes:

```

1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      int 60seconds = 60;
7      int 60minutes = 50;
8
9      cout <<"One hour is: " << 60seconds * 60minutes);
10
11     return 0;
12 }

```

Invalid variable character, Numbers are not allowed in the front in declaring variables

Wrong inputted value in conversion of an hr. 1 hr = 60 mins not 50.

Unexpected character, Ending an argument or line ends with a semicolon.

Fixed Source Code:

```

1  #include <iostream>
2  using namespace std;
3
4  int main () {
5
6      int sixtyseconds = 60;
7      int sixtyminutes = 60;
8
9      cout <<"One hour is: " << sixtyseconds * sixtyminutes;
10
11     return 0;
12 }

```

Output:

```
C:\Users\lenovo\Downloads\Hands-on Activity 1.3.exe
One hour is: 3600
-----
Process exited after 0.1807 seconds with return value 0
Press any key to continue . . .
```

Example 5: Check the program below. Find all possible compilation errors and logic errors. Fix them. Your version of the program must print the same result as the expected output. Before you use your compiler, try to find the errors only by manual code analysis. If you want to improve the variable names, then do so, but remember that variable names have to be as descriptive as possible, and also as short as possible.

```
#include <iostream>
using namespace std;

int main()
{
    int ip Part1 = 027;
    int ip Part2 = 0;
    int ip Part3 = 0;
    int ip Part4 = 1;
    cout<<"Localhost IP is "<< ip Part1, ip Part2, ip Part3, ip Part4);
}
```

Example output

Localhost IP is 127.0.0.1

Error Codes:

The screenshot shows a C++ program with several errors highlighted by red circles and arrows pointing to explanatory text boxes:

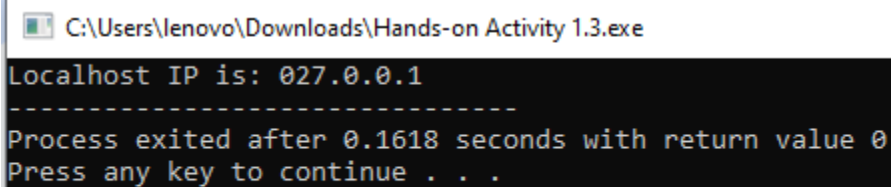
- Invalid variable declaration:** An arrow points to the variable names in the declarations: `int ip Part1`, `int ip Part2`, `int ip Part3`, and `int ip Part4`. The text box states: "invalid variable declaration, No special characters or spaces should be used in creating a variable."
- Missing "Return 0;":** An arrow points to the end of the `main` function. The text box states: "Missing 'Return 0;'"
- Octal notation:** An arrow points to the value `027` in the assignment `027`. The text box states: "027 is being interpreted as octal (base-8) notation, which you are assigning octal value 027, not '027' as a constant value."
- Wrong way to insert a variable:** An arrow points to the comma-separated list of variables in the `cout` statement. The text box states: "Wrong way to insert a variable, comma combines the values, if you need a constant value insertion, it should be inserted separately."

```
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
11      cout << "Localhost IP is: " << ip Part1, ip Part2, ip Part3, ip Part4);
12
13
14 }
```

Fixed Source Code:

```
1  #include <iostream>
2  using namespace std;
3  #include <iomanip>
4
5  int main () {
6
7      int iP1 = 27;
8      int iP2 = 0;
9      int iP3 = 0;
10     int iP4 = 1;
11
12     cout << "Localhost IP is: " << setfill('0') << setw(3) << iP1 << "." << iP2 << "." << iP3 << "." << iP4;
13
14     return 0;
15
16 }
17
```

Output:



```
C:\Users\lenovo\Downloads\Hands-on Activity 1.3.exe
Localhost IP is: 027.0.0.1
-----
Process exited after 0.1618 seconds with return value 0
Press any key to continue . . .
```

8. Conclusion

This activity has guided me in enhancing my ability to seek logical and coding errors more efficiently, also helped me gain a wider interpretation of how codes should be more easier and understood in terms of improvising and solving issues. It helped me to furtherly understand that there are many ways to see and to solve, but this activity shows the better and the efficient way to produce easier result.

9. Assessment Rubric