



THE SUPERIOR UNIVERSITY LAHORE

Week 3 – Programming Fundamentals Lab (Fall 2022)

Name:

Roll no:

Section:

Subject: Programing fundamentals

Instructor: Ms. Sanya Abdullah

Task 1: Recite Darood Shareef. Sit straight and confident. Give me a sweet Smile ☺

Task 2: Let's write your learning about previous Lab Activity. 1st write on your rough papers. And raise your hand and say "I did it". So Tell me some of the errors you face in last activity and what did they teach you? ☺ :

TASK3: LABEL ACTIVITY ☺ : Mark the two things (in the main function) that compiler will ignore(as its for us). Label it and write the reason here.

```
#include <iostream>
using namespace std;
int main()
{
    // hello world program
    cout << "Hello, world!";
    cout << "Hello, world 2" <<endl;
    /* This is a
    hello world program */
    return 0;
}
```

TASK4: Learning from the Theory class concept: Replicate it on editor and write what you learn:

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

int main () { cout
<<
"Every age has a language of its own\n"
; return
0;}
```

TASK5:

What does the following code print?

```
cout << "\n**\n***\n****\n*****" << endl;
```

CHALLENGE ☺ : Can you make any other 2 shapes, in the same way? Shout "I did it" ☺

TASK5: Write a single C++ statement to accomplish each of the following (assume that `using` directives have been used):

1. What does “\n” do? Write a basic c++ program with two output streams in it, that shows the working of “\n”:
2. Print the message "This is a C++ program" on one line.
3. Print the message "This is a C++ program" on two lines. End the first line with C++.
4. Print the message "This is a C++ program" with each word on a separate line.
5. Print the message "This is a C++ program" with each word separated from the next by a tab.

Task 6: Write a single C++ program or line that prints the message on the screen: “Enter two numbers”. Also Document your program (by stating at Top).

TASK7: What, if anything, prints when each of the following statements is performed? If nothing prints, then answer “nothing.” Assume $x = 2$ and $y = 3$.

- a) `cout << x;`
- b) `cout << "x";`
- c) `// cout << x;`
- d) `cout << x + x;`
- e) `cout << "x + x";`
- f) `// cout << x + x;`
- g) `cout << "x=";`
- h) `cout << "x = " << x;`
- i) `// cout << "x + y = " << x + y;`
- j) `cout << "\n";`

Task 8: Write a statement (or comment) to accomplish each of the following (assume that using declarations have been used for `cin`, `cout` and `endl`):

1. Document that a program calculates the product of three integers.
2. Include the basic header files of the program. Make a main function structure.
3. Declare the variables `x`, `y`, `z` and `result`, to be of type `int` (in separate statements).
4. Declare the variables `x`, `y`, `z` and `result` to be of type `int` (in separate statements) and initialize each to 0,10,20, respectively.
5. Compute the product of the three integers contained in variables `x`, `y` and `z`, and assign the result to the variable `result`.
6. Print "The product is " followed by the value of the variable `result`.
7. Return a value from `main` indicating that the program terminated successfully
8. **Now replicate the whole work on editor as whole program.**

TASK 8 HOME CHALLENGE: Program that plays with Basic Arithmetic Operators.

CONGRAGULATIONS ON LEARNING. CLAP FOR YOURSELF ☺

