**Programming Fundamentals – Assignment**

**Question1:** As we know logic can be different depending upon a programmer’s thinking. How the best logic can be beneficial in problem-solving skills. Prove it with an example.

**Question2:** How a C++ program become able to execute and perform different actions? Explain the complete cycle from scratch to displaying output like (writing a code, compiling, checking errors, flow of compiling, code conversion into binary, linking, loading and execution.)

**Question3:** What are data types and why it is important to declare a variable with the appropriate data type? Where we should use variables and constants and how these should be handled in memory. Briefly explain all scenarios with examples.

**Question4:** What is selection control structure? What do you think can a switch structure be a good alternative to if-else structure? Which branching mechanism out of these two would you prefer and why?

**Question5:** What are the different phases of a loop? Which looping structure you prefer most and why? Explain its flexibilities and different uses according to different scenarios.