Day 2 – 24 June 2024 Training Day 2 Report **Date:** 24 June 2024

Topic: Python Control Statements and Functions

Summary:

On the second day of my Machine Learning training, we continued learning Python programming concepts in more depth. The trainer started with control statements, which help in making decisions and repeating tasks in a program. I learned about if, elif, and else statements that allow a program to make decisions based on conditions. We practiced writing small programs using these statements, such as checking whether a number is positive or negative, and finding the greatest among three numbers.

Next, we learned about loops in Python — for loop and while loop — which are used to execute a block of code multiple times. The trainer explained the use of the range() function in loops and also introduced break and continue statements to control loop flow. These concepts helped me understand how repetitive tasks can be done efficiently in programs.

After that, we moved on to functions in Python. We were taught how to define and call functions using the def keyword. The trainer explained the difference between built-in functions (like len(), max(), sum()) and user-defined functions created by programmers. We also practiced writing simple functions that take parameters and return results.

By the end of the session, I had written multiple Python programs combining conditions, loops, and functions, which helped strengthen my understanding of programming logic.

Key Learnings:

- Understood how conditional statements (if-elif-else) work in Python.
- Learned about for and while loops for repeating code blocks.
- Understood the purpose of break and continue statements.
- Learned how to create and use user-defined functions.
- Practiced combining control statements and functions in small programs.

Conclusion:

Day 2 of training helped me build a strong foundation in Python programming. I now feel more confident writing structured and logical code using conditions, loops, and functions. These concepts will be very helpful in the upcoming topics related to data handling and Machine Learning.