**RESEARCH PROJECT ON THE 5 PARADIGMS OF PROGRAMMING**

Programming paradigms are fundamental approaches to writing code. Understanding these concepts can broaden your perspective and enhance your coding skills Lets dive into the five popular paradigms

**1. IMPERATIVE PROGRAMMING:** Imperative programming involves giving detailed instructions to the computer. It is like following a recipe: “Mix the ingredients pour into a mold and bake for 35mins”

**2. PROCEDURAL PROGRAMMING:** Procedural programming builds on imperative programming by organizing code into reusable functions. This approach promotes modularity and structure.

**3. FUNCTIONAL PROGRAMMING:** Functional programming treats functions as first class citizens, emphasizing pure functions and minimizing side effects. This paradigm encourages modular, maintainable code

**4. DECLARATIVE PROGRAMMING:** Declarative programming focuses on specifying what the program should achieve, rather than how it is done. The approach abstracts away complexity, making code more readable and efficient

**5. OBJECT ORIENTED PROGRAMMING:** Object oriented programming (OOP) organizes code into objects that contain data and methods. OOP promotes modularity, reusability, and a clear separation of concerns

**CONCLUSION:**

Understanding these five programming paradigms can help you become a more versatile and effective coder. Each paradigm has its strengths and weaknesses, and knowing when to apply each approach can make a significant distance in your coding