# Task 4

Student Name: Shreyas Bharadwaj Nidaghatta Ravi

Student ID: 11645440

Email: [shreyasnr6666@gmail.com](mailto:shreyasnr6666@gmail.com)

Lecture Name: Recep Ulusoy

# Difference between procedural programming, functional and object oriented?

|  |  |
| --- | --- |
| Declarative programming paradigm | Imperative programming paradigm |
| This type of programming is called as a paradigm related to programming that are quite helpful to expresses the number of issues related to computation logics without considering the control flow. | The programs which are very simple and easy to write and read and they are classified in to various imperative statements that are also called as code blocks. |
| This type of programming is called as a paradigm that include multiple number of programmers who will define that what type of need can be proficient by using the implemented and designed program | Imperative programming paradigm helps to describe the sequence of multiple steps or activities that are the basic element of computer. it is also called as procedural programming it involves the high level of abstraction that is present in declarative programming. |
| Functional logics belongs to declarative paradigms and Functional logics paradigms not always Turing-complete because they are not always universal programming languages | The code of block related to this programming paradigm called as compound statements also known as procedures or functions. |
| Various Examples of declarative paradigms are CSS, HTML, Prolog, XML, Haskell, SQL, F# and Lisp. | Various Examples of Imperative programming language include MATLAB, FORTRAN ALGOL, assembly language, C++, Java and COBOL etc. |

# Programming languages used for these different paradigms

|  |
| --- |
| Imperative programming paradigm   * Java: is demarcated as programming language that is used for developing the number of application website that will satisfy the requirements of online users * ALGOL: is defined as the code of blocks pairs that are also christened as IAL (International Algebraic Language) * C++: is also defined as a programming language that works on middle-level and established by Bjarne Stroustrup in the year of 1979 at Bell Labs. C++ is most suitable for variety of platforms like Mac OS, Windows, and UNIX or Linux. * MATLAB: is also defined as multi-paradigm that include the numerical computing environment for number of problems of customer. |
| Declarative programming paradigm   * HTML: outlooks as Hyper Text Markup Language and this language provide structure for Web pages that integrate the markup. building blocks Web pages are the main elements of HTML (Hyper Text Markup Language) and the elements of HTML represented by number of tags can be included in this language. * CSS: Cascading Style Sheets is tool that can be used for adding style like fonts, colors, spacing to number of Web documents for the beneficence of business and users and this also describes how the elements or tags of HTML are used to be displayed on screen for interactive user interface. * XML: is defined as the extensible Markup Language that is very similar to HTML (Hyper Text Markup Language) that is self-descriptive * SQL: Structured Query Language (SQL) is quite helpful to influence or operate the data. Structured Query Language (SQL) is also defined as the standard of American National Standards Institute for programming languages that helps to store the information of user. * Prolog: is general-purpose programming language that is associated with the computational linguistics and artificial intelligence * Lisp: is defined as the computer programming language that generally uses the fully parenthesized and distinctive or prefix notation for generating the query |

# Advantages provided by these different programming approaches

|  |
| --- |
| Imperative programming paradigm   * Effective or reusability: The multiple number of concept considering the polymorphism, inheritance concepts that provide number of robust solution to specific problems. * The arrangement of exhibiting a program in which the collection of various objects and classes is present and that will deliver a high degree of modularity to number of its users. |
| Declarative programming paradigm   * This Declarative programming paradigm helps to resolves the number of issues related real life implications by keeping code to a minimum or optimized level. * Proving the proficiency and acceptability of a given program. |