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(OBJECTIVE)

This is my dream to become a programmer when I was in 1st year, and I saw the movie (The matrix). In which mostly they work on programming which I love a lot. And my interest to this field increase. The object to choose this field to polish my following skills which may contain

- *Analytics Skill.*
- *Problem Solving Skills.*

(Motivation)

In the modern age of era when almost fields have relating and connecting with the computer science and information technology field. A lot of people is aware and interesting day by day to how it is possible. A few Years Ago I also came to know about this field and myself force to search it and I start searching about this deeply, I have come to know a lot of things in Information Technology. It is a very interesting and a wide field.

Some Interesting Movies for the Computer Science.

- Black hat
- Anonymous
- I.T.
- We Are Legion: The Story of the Activists

Programming Languages

Introduction:

A programming language is a formal language, which comprises a set of instructions that produce various kinds of output. Programming languages are used in computer programming to implement algorithms.

Thousands of different programming languages have been created, and more are being created every year. Many programming languages are written in an imperative form (i.e., as a sequence of operations to perform) while other languages use the declarative form (i.e. the desired result is specified, not how to achieve it).

The description of a programming language is usually split into the two components of syntax (form) and semantics (meaning). Some languages are defined by a specification document (for example, the C programming language is specified by an ISO Standard) while other languages (such as Perl) have a dominant implementation that is treated as a reference. Some languages have both, with the basic language defined by a standard and extensions taken from the dominant implementation being common.

Examples: C, C++, COBOL, Java, FORTRAN, Ada, and Pascal. Python etc.

History of Programming Language:

Our programming language assignment help writers give you complete programming assignment writing services. In the year 1950, the first ever programming language was developed to instruct the computers. Since then, there has been significant development of more than 500 worthy programming languages and it remains a continuous process to design more advanced forms. The short code language proposed by John Archly in the year 1951 was different to that of machine code in various aspects. The short code was designed with

comprehensible mathematical expressions but was not powerful enough to run faster like machine codes. Autocued is another significant computer language developed in mid-1950 which automatically converts codes into machine language by using compilers

The main models of programming language were developed between the periods of 1960 to 1970.

- Array programming was introduced by APL which plays a major role in influencing functional programming
- The structural procedure of programming was refined by ALGOL
- Object-oriented programming was supported by the machine language Simulate
- C is the most popular system programming language developed in 1970
- The first ever language of logic programming is considered to be Prolog developed in the year 1972.

Why Programming Languages:

Programming is important to create software and applications that help computer and mobile users in daily life. Due to all these reasons, it's really important to learn how to use programming languages in our daily life. It is important for learning to innovate, create eco-friendly solutions for global problems.it is important in our daily life to enhance and increase the power of computers and the internet. It's for speeding up the input and output processes in a machine. Programming is important to automate, collect, manage, calculate, Analysis the processing of data and information accurately.

Java, JavaScript, C#, C++, PHP, Python, Swift, SQL, Ruby, etc. programming languages are the reasons behind the innovations in information technologies. If today we are seeing robots, artificial intelligence, machine learning, bit coins, the Block chain, IOT (Internet of Things), Cloud Computing, etc. new technology and products in IT industry, then it's because of programming languages.

DIFFERENT LEVEL OF PROGRAMMING LANGUAGES

Programming language is broadly classified according to its levels.

1. MICRO-CODE

- Each component of CPU is directed by this machine specific code in order to perform minute scale operations
- The programmers develop instructions written in micro-code in order to execute micro-programs
- Generally used in CPUs and other processing units such as microcontrollers, channel and disk controllers, processing unit of digital signal and graphics, controllers of the network interface etc.
- Microcode typically converts instructions into machine language and be a feature of high speed memory. For more on microcode, get our programming language assignment help.

2. MACHINE CODE

- Machine code is a series of instructions executed directly by the CPU of a computer
- Machine code is relative to the architecture of computer
- Numeric machine code is considered as the hardware-based primitive language of programming which represents assembled computer programs in lowest level
- However, programs that are written directly into numeric machine code give rise to problem centric calculations

3. Assembly Language

- It generally represents the domain of low level programming language
- Assembly language is translated through an assembler into the machine code respective to the computer architecture
- It is different from that of the multiple utility system of high-level programming language
- Low–level machine codes or operations are instructed through mnemonic
- Operands like symbols, labels and expressions are essentially required to execute one instruction.

4. Low Level Programming Language

- It is a type of programming language that has negligible or no abstract with the set of instructions configured in computer's architecture

- Low level language refers to both the assembly language and machine code
- However, the language does not have any abstractions with the machine language but is related to the hardware
- It does not require the use of interpreter or compiler to translate the language into machine code
- Low level language written programs are simple with negligible memory footprint and runs much faster
- It incorporates elaborate technical details. Hence its utility is quite difficult. For low-level programming language help, try our programming language assignment help.

5. HIGH LEVEL PROGRAMMING LANGUAGE

- This programming language has strong abstraction with the detailed instructions configured in the computer
- It is highly comprehensive and simpler process of programming language
- High level language use autocued as compilers to translate the language into machine code
- High level language deal with data item abstracts such as threads, arrays, objects, loops, locks, subroutines, Boolean and complex arithmetic expressions, variables, functions, objects etc.

In comparison to low level language, high level language emphasize on optimum efficiency of program.

Types of Programing Languages

Explain the various types of programming language. Programming languages are considered in details below:

C LANGUAGE

It is considered to be the most imperative and general purpose machine language intended to serve as the building blocks for various popular programming languages such as JAVA, C#, Python, JAVA script etc. The effective application of C language is to execute the operating systems and various applications embedded into it

C++

It is a system programming language with imperative, generic and object-oriented features of programming. C++ is used to design in embedded and operating system kernels. It is a complied version of programming language

that can be used in multiple platforms including in servers, desktop and entertainment software applications. C++ is ISO standardized and its most new version is C#.

PYTHON

It is a high-level general purpose programming language. The language is designed to simplify the overall application. Unlike Java and C++, the language encourages readable codes and implication of concepts incorporating fewer code lines.

SQL

It is the abbreviation of Structured Query Language considered to be a language for the special purpose programming. It is efficient for processing stream of relational data management system and for manipulating data in the relational database of management system. Moreover, SQL is specialized as data definition and data manipulation language due to its in-built configuration of relational calculus and relational algebra.

JAVA SCRIPT

It is a scripting language based on prototypes featured with dynamic and high class functions. Being a significant part of the web browser, implementation of JavaScript helps to manipulate the browser, conduct asynchronous communication, allows interaction with the user to client scripts and transforms the content of displayed document.

IEEE Survey 2019 for Top Ranking Languages

According to IEEE Spectrum's interactive ranking, Python is the top programming language of 2019, followed by C, Java and C++. Of course, the choice of which language to use depends on the type of computer the program is to on, what run sort of program it is, and the expertise of the programmer.