**BÁO CÁO VỀ TÌM HIỂU VỀ LẬP TRÌNH VÀ THUẬT TOÁN**

**NHÓM 4 QUESTION 1:**

|  |  |  |
| --- | --- | --- |
| **C language** | **C#** | **Matlab** |
| **Is a highly interoperable, structured language.**  **suitable for demanding high-speed programs or system programs, difficult to control complex problems.**   * **C is a low level programming language.** * **Simple and useful in understanding editing concepts of programming.** * **of the procedural language type.** * **using the top-down approach (top-down approach).** * **only pointers, no reference variables.** * **runs on many operating systems.** | **C# can do most of the good properties of object oriented models.**  **C# programming language mainly works on .NET framework (.NET framework)**   * **C# is a high level programming language.** * **Simple easy to understand feature.** * **is pure object-oriented language.** * **Support automatic garbage collection.** * **has both pointers and reference variables.** * **only runs on Windows operating systems** | **Matlab is an interactive environment for numerical computation, programming and data visualization.**  **mainly solving math problems.**   * **Helps create cells for data visualization.** * **provides tools for building hidden graphical user interfaces.** * **Allows for design modeling and simulation of systems** |

**QUESTION-2**.**list and briefly describe 4 programming languages at the same level with C( high level programming language ).**

**-java**: use open source code, fast, secure, and reliable, mainly use to develop software systems, saving time for web programming.

**-pascal**: an imperative and procedural programming language, as a small, efficient language intended to encourage good programming practices using structured programming and data structuring.

**-Python**: syntax, web programming easy, help code faster, stable, flexible.

**-Ruby** : same with python, easy, comfortable, use open source code, seprate with HTML, works on multiple platforms and can embed HTML.

**QUESTION-3**: **DEV-C++ is a free full- featured intergrated development enviroment (IDE) distributed under the GNU General Public License for programming in C and C++. It is written in Delphi.**

**Feature of DEV-C++:**

1. Has a Tool manager that contains various tools that can be used in the project.
2. Using DEV-C++ IDE, we can create various type of applications be it Windows, console, static libraries or DLLs.
3. We can also create our own project tempaltes to create our own project types.
4. It has a Project Manager that helps us to manage various project.
5. We can easily install the add-on libraries using the package manager provided by the IDE.