| | С | C++ | JAVA | PYTHON |
|--------------------|--------------------------------|-------------------------------------|-------------------------------------|--|
| Language Type | Procedure Oriented Language | Object Oriented Language | Object Oriented Language | Both Procedural & Object Oriented Language |
| Developer | Dennis Ritche | Bjarne Stroustup | James Gosling | Guido Van Rossum |
| Building Block | Function Driven | Object Driven | Both Object and Class Driven | Function, Object and Class Driven |
| Extension | .c | .срр | .java | .py |
| Platform | Dependent | Independent | Independent | Independent |
| Comment Style | /* */ | // Single Line /* */ Multi- Line | // Single Line /* */ Multi- Line | # Single Line """ """ Multi Line |
| Keywords | 32 | 50 | 63 | 33 |
| Dynamic Variable | not supported | not supported | not supported | support |
| Data Security | Not Secure | Secure (less than Java) | Fully Secured | Secure (less than Java) |
| Case Sensitive | Yes | Yes | Yes | Yes |
| Header Files | Supported | Supported | Import Pacakages | Import Packages |
| Pointers | Supported | Supported | Not Supported | Not Supported |
| Exception Handling | No | Yes | Yes | Yes |
| Translation Type | Compiled | Compiled | Compiled & Interpreted | Interpreted |
| | | | | |

| | C | CH | JAVA | PYTHON |
|-----------------------------------|--|--|--|---|
| Database Connectivity | not supported | not supported | Supported | Supported |
| Input | scanf() | cin | Scanner Class or BufferedReader Class | input() |
| Output | printf() | cout | System.out.println() | print() |
| SemiColon at the end of statement | Yes | Yes | Yes | Not Required |
| Representing Block of Statements | {} | {} | {} | Indentation |
| Declaring Variables | Required | Required | Required | Not Required |
| Applications | Compilers , Interpreters , Embedded Programming etc. | Simple Desktop Applications, Embedded Systems etc. | Desktop GUI, Mobile, Web, Gaming etc. | Desktop, Web, Gaming, Network Programming etc. |
| IDE | Turbo C, Code Blocks | Turbo C++, Code Blocks | Eclipse , NetBeans etc | PyCharm , PyDev, IDLE, Jupyter Notebook, Spyder etc |