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Characteristics of Programming Languages
Factors influencing the evolution of Programming Language

Characteristics of Programming Languages

Simplicity:
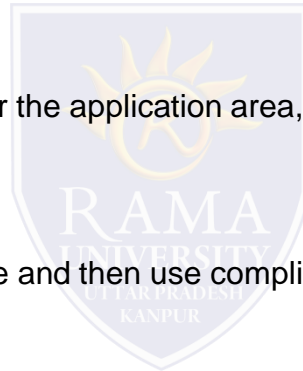– A good programming language must be simple and easy to learn and use.

Naturalness:
– A good language should be natural for the application area, for which it has been designed.

Abstraction:
– Abstraction means the ability to define and then use complicated structures or operations in ways that allow many of the details to be ignored

Efficiency:
– Programs written in a good programming language are efficiently translated into machine code, are efficiently executed.

Structured:
- Structured means that the language should have necessary features to allow its users to write their programs based on the concepts of structured programming

Compactness:
- In a good programming language, programmers should be able to express intended operations concisely

Locality :
- A good programming language should be such that while writing a programmer concentrate almost solely on the part of the program around the statement currently being worked with.

Factors influencing the evolution of Programming Language

The following are the different factors which affect the choice of programming languages:

- Purpose

- Programmer experience

- Ease of Development and Maintenance

- Suitability

- Performance and Efficiency

- Availability of IDE

- Error Checking and Diagnosis