# Basics of C language

## Syllabus:
History, Features, C program Structure, C program compilation and execution process.

## History:
     'C' language was developed by Dennis Ritchie in 1972 at AT & T's Bell Laboratory of USA. The historical developement of 'C' language as follows:
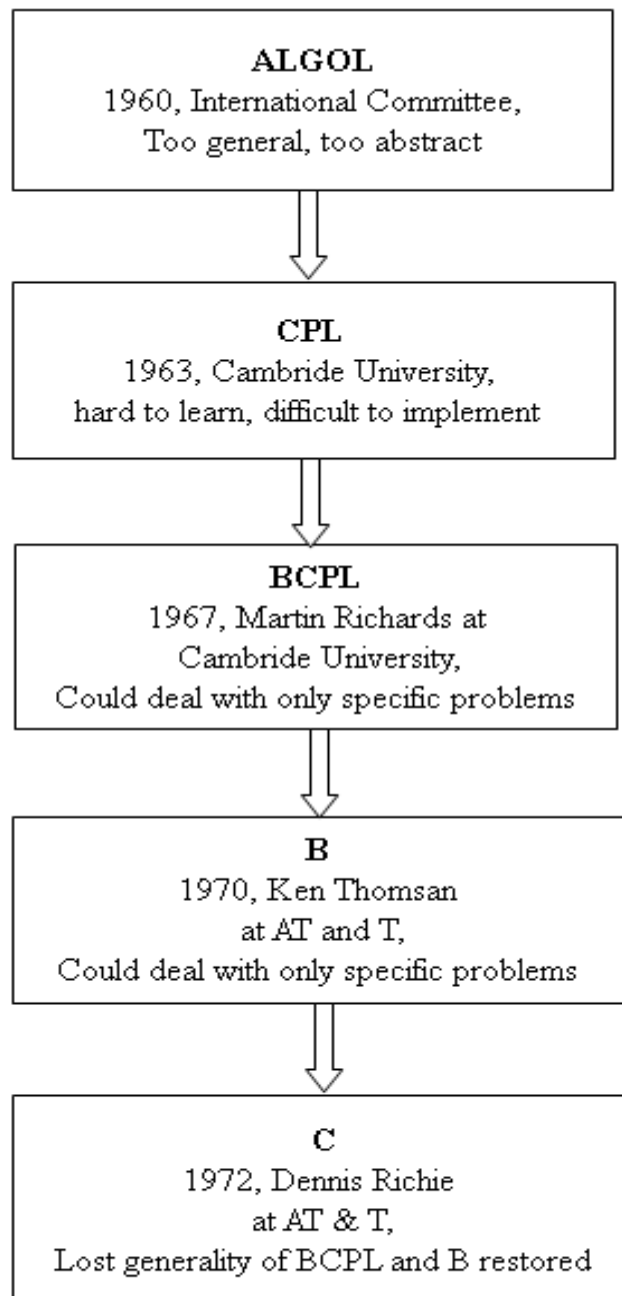
```
┌─────────────────────────────────┐
│           ALGOL                 │
│  1960, International Committee,  │
│     Too general, too abstract   │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│            CPL                  │
│    1963, Cambride University,   │
│  hard to learn, difficult to implement │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│           BCPL                  │
│    1967, Martin Richards at     │
│      Cambride University,       │
│  Could deal with only specific problems │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│             B                   │
│     1970, Ken Thomsan           │
│        at AT and T,             │
│  Could deal with only specific problems │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│             C                   │
│     1972, Dennis Richie         │
│        at AT & T,               │
│  Lost generality of BCPL and B restored │
└─────────────────────────────────┘
```

**Fig.1. Historical development of C**

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## Features:

1. C is a general purpose programming language used for developing system and application softwares.
2. Powerful
3. Flexible
4. Portable
5. Elegent
6. Structured programming language
7. Contains 32 keywords.
8. C is a blocked structured programming language.
9. Program written in c language and fast and efficient.

## C program Structure:

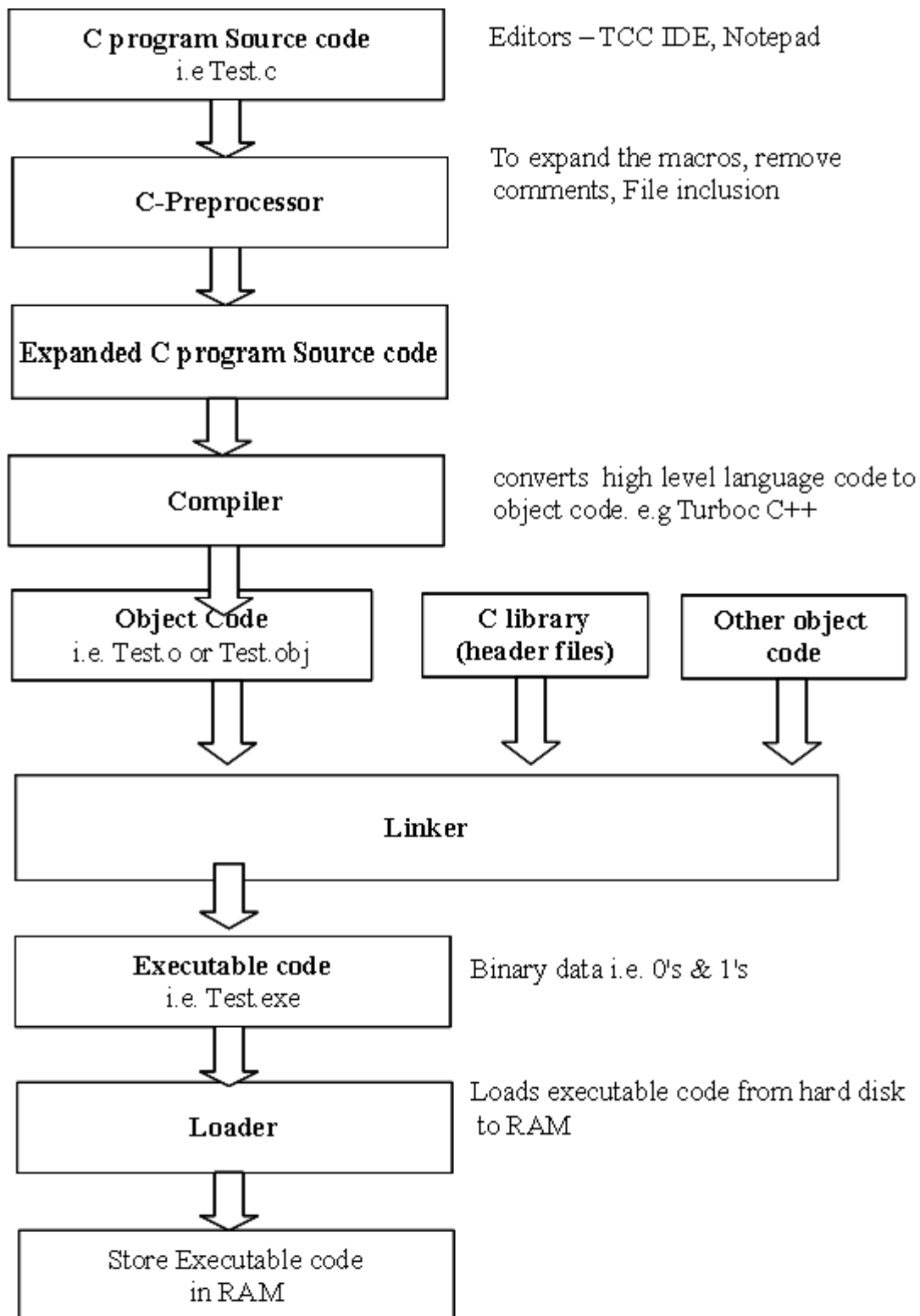| |
|---|
| **Documentation Section** |
| **Header file declaration Section** |
| **Global variable declaration Section** |
| **Main Function**<br>{<br>    Local declarative statements<br>    Executable code/ statements<br>} |
| **Function Definitions part**<br>Function1()<br>{<br>}<br>.<br>.<br>.<br>Function n |

# C program compilation and execution process:



Fig.2. Process to compile and execute C program

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