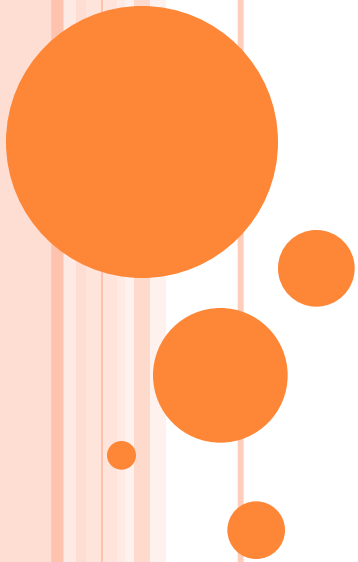


INTRODUCTION

1. **Procedural Languages**
2. **Structured Languages**



1. PROCEDURAL LANGUAGES

This is one of the simpler programming paradigms where a program is represented much like a cook-book recipe means having a starting state a list of operations to be completed and then must be an ending point. This programming specifies list of operations that the program must complete to reach the desired state. This approach is also known as “Imperative programming”. The main idea is the concept of procedure call.

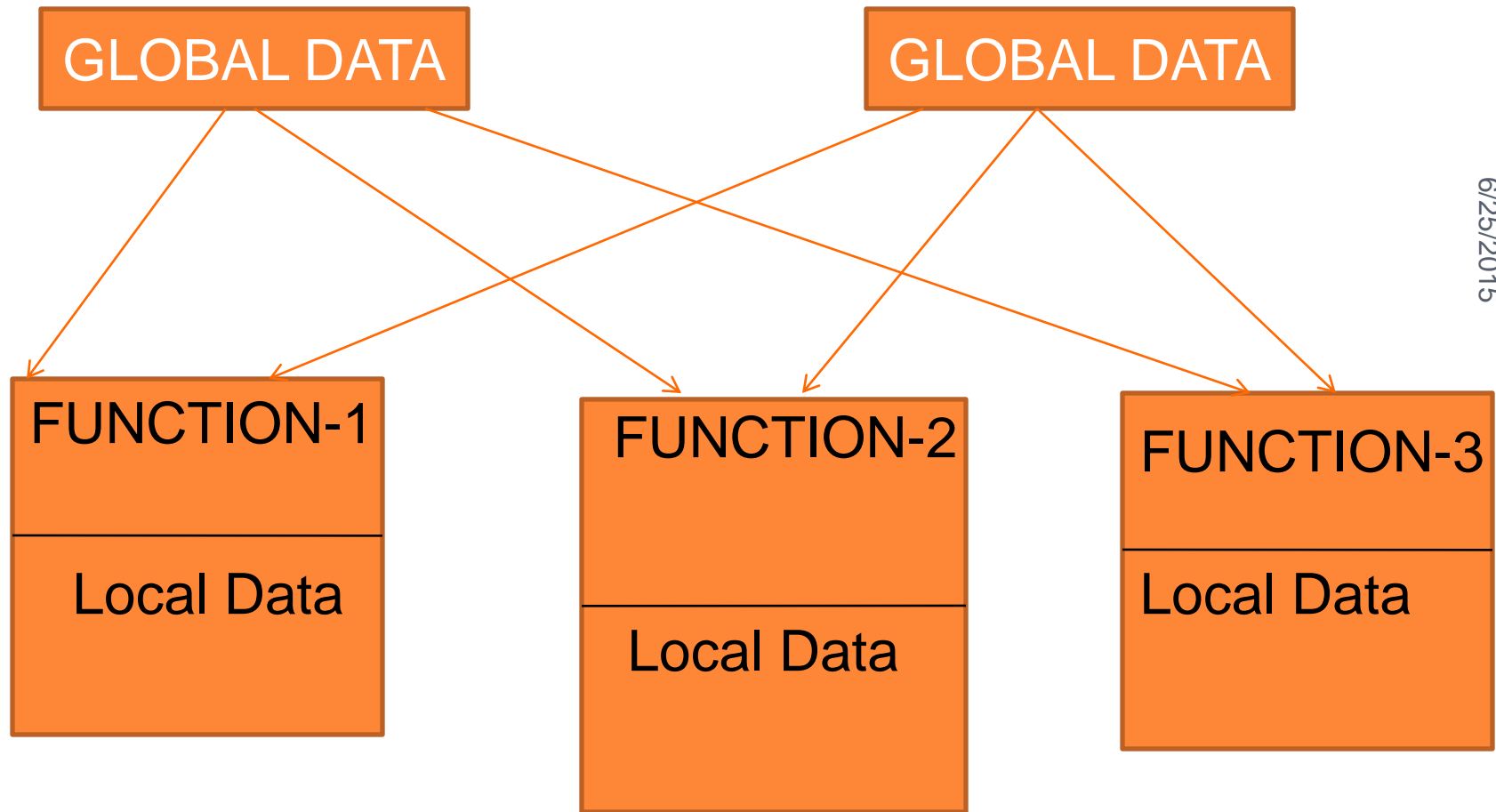
Procedure are also known as

- **Function**
- **Subroutine**
- **Methods**

Languages that comes under this category are:

- **FORTRAN**
- **C**
- **BASIC**

PROCEDURAL LANGUAGES



6/25/2015

Relationship of data and function in procedural programming

PROCEDURAL LANGUAGES

Characteristics:

1. Algorithms are basic concern
2. Large programs are divided in to smaller programs known as function
3. Most of function share the data
4. Data move openly around the system from function to function
5. Top down approach is implemented

Advantages:

The student with no programming experience must start with this programming style as :

1. A specified sequence of steps is the natural approach in problem solving.
2. It can be easily merge with other programming style due to its flexibility
3. Localized knowledge, cohesive modules and clean interface can be easily implemented in this style

PROCEDURAL LANGUAGES

Advantages:

4. The programs is entirely under the programmer's control. Debugging and testing is straight forward
5. The ability to re-use the same code at different places without copying it
6. An easiest way to keep track of program flow than a collection of "GOTO " or "JUMP" statements.
7. The ability to be strongly modular or structured

Disadvantages:

1. Its breaks down when programs get very large.
2. It doesn't model the real world problems very well.

2.STRUCTURED LANGUAGES

It is special type of procedural programming. It provides additional tools to manage the problem that that larger programs were created. It's main basic objectives/principles :

1. Incremental progress
2. Data structure localization
3. Modular decomposition
4. Readability
5. Clarity of programs
6. Easy modification
7. Reduce testing problems
8. Avoid the use of the GOTO statement
9. Top down approach is implemented

Structured programming requires the programmers break program structure in to small pieces of code that easily can understand

The languages that comes under this category:

2.STRUCTURED LANGUAGES

1. C
2. Pascal
3. ADA
4. ALGOL
5. PL/I

Advantages:

1. It is much more flexible than procedural language

3.Object –Oriented Programming Languages:

Salient features are:

- It is a newest and more powerful style of programming and its concept comes in 1960.
- As hardware and software become more complex
- Researchers main concept toward the data itself rather than process or procedure
- Data structure is combined with some basic operation