**Chapter 2: Introduction to Structured Programming**

**Ref book: Programming Practices & Techniques (6th edition)**

1. **What do you mean by Structure Programming?**

**Ans:**  A collection of techniques for the planning and writing of programs that increase programmer’s productivity e.g

-Top down programming and the use of loop,

-Selection,

-Sequence structure

1. **What is Modular Programming? How does it implement?**

**Ans:**  An early stage in the development of structured programming.

A program is broken down into pieces, or modules which can be coded and

tested separately.

1. **What are sub routines?**

**Ans:**  A set of instructions for performing a particular task that can be called when needed.

1. **What is an internal sub module?**

**Ans:**  An Internal sub modules is part of the program that uses it

1. **What is External sub module?**

**Ans:** A set of instructions for performing a particular task that can be used by any program because the instructions reside a library that is external to the using program.

1. **What are the problems with the modular approach?**

**Ans:**  The modular programming approach initially met with some resistance from programmers because it restricted their activities. When positions of a program are allocated to different programmers no one program can be said to”own” the program; instead, it belong to a team.

1. **What do you mean by top-down programming?**

**Ans:**  A technique for planning a structured program in which the entire program is first broken down into three modules:

1.The processing that takes place before any data is processed

2.The processing of data and

3. The processing that takes place after all data records have been read.

These modules in turn are successively subdivided until each module performs single, limited functions.

1. **What are structure charts?**

**Ans:** The structured chart is a commonly used planning tool in top-down

Programming

-this tool is sometimes referred to as a hierarchy or hierarchical, chart, or

a visual table of contents (VTOC).

-there is no standard for structured chart & techniques

-Rectangles are used to represent modules

-Each module is assigned a number, with zero reserved for the main

program module

1. **What are dummy modules?**

**Ans:**  A record placed at the end of a file to signal that there is no more data to be processed.

1. **What do you know about hierarchy chart?**

**Ans:** Another name of structured chart; a tool for top down program planning.

1. **What is a structure chart?**

**Ans:**  A tool to use in the top down planning of a structured program that shows the modules that comprise the program, and also shows the modules called by each modules.

1. **What is GOTOless Programming?**

**Ans:** Programming without the use of branch instructions.

1. **What do you mean by loop structure?**

**Ans:** one of the three fundamental programming structures;provides for the repletion of certain instructions as long as a condition is true.

1. **What id Priming read?**

**Ans:** Reading the first record in a file prior to entering a loop that is executed until EOF is detected.

1. **What is not EOF?**

**Ans:** Not End of file when reading a file.

1. **What is the difference between flowchart & Structure chart?**

**Ans:**  A representation using standard outlines of the processing steps to be used to solve a problem.

1. **What do you know about selection structure?**

**Ans:** one of the three fundamental programming structures; provides the ability to choose between two alternative courses of action on the basis of whether a condition is true or false.

IF condition**-**B THEN

Instruction**-**T

ELSE

Instruction-F

END IF

1. **What do you know about “pseudo code”?**

**Ans:** A way to represent instructions that uses ordinay English; a planning tool for structured programming.

1. **What do you mean by “nested”?**

**Ans:**  Included within another,as…

A loop structure within another loop structure (nested loop)

A selection structure within another selection structure (nested IF)

1. **What do you mean by main program module?**

**Ans:** Each program contains a main program module which ultimately controls everything that happens.

1. **Write down some loop structure?**

**Ans:**

Do WHILE (condition-A)

Instruction-1

Instruction-2

……

END DO

FOR i=j to k by

Instruction-1

…..

END FOR

**VTOC =**Visual Table Of Contents

**IOCS =** Input Output Control System (A part of the operating system of a computer that handles the reading and writing of records.