**Chapter 4: Complex Combinations Of Conditions**

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

1. **How can we identify redundancy?**

**Ans:** Redundancy exists when there are more rules than are necessary. We can identify redundancy as follows:

**1.** Look for two files that have the same actions.

**2.** Then if all condition entries but one are exactly the same, there is

redundancy between the two rules.

1. **Why do we use decision table?**

**Ans:** We use decision table to plan and document processing that involves complex combination of conditions. We use decision table to list what combination of conditions will lead to what actions.

**3. What do you mean by the following term……?**

** Action entry** (Page No-79)

**Ans:**  An action to be taken under a rule in a decision table.

**-**The action entries **shows for each rule just what action will**

**be taken**

** Action stub** (Page No-79)

**Ans:** The list of actions in a decision table

**-**The action stub **lists the possible actions in the order** that they

will be taken.

** Condition entry** (Page No-79**)**

**Ans: -**The condition entries consists of a series of rules

** Condition stub** (Page No-79)

**Ans:** The **list of conditions** in a decision table.

-The condition stub contains simple condition.

-Conditions in the condition stub have an **AND** relationship.

**-**To show an **OR** relationship we use **multiple rules**.

** Redundancy** (Page No-79)

**Ans:** A situation in which **more than one rule of a decision table** may be applied for **a given combination of conditions.**

** Contradiction** (Page No-80)

Ans: A situation in a decision table in which **the same combinations of conditions** lead to different actions.

** Decision table**

**Ans:**  A tool for planning and documenting processing that involves

complex combination of conditions.

** Program switch**

**Ans:**  A field in memory, having the value of true or false that is used to record a condition.

** Rule:**

**Ans:**  A part of a decision table that indicates what actions are to be taken under a given combination of conditions.

** Stub**

**Ans:**  The portion of a decision table that lists all the conditions to be examined and the various possible actions to be taken.