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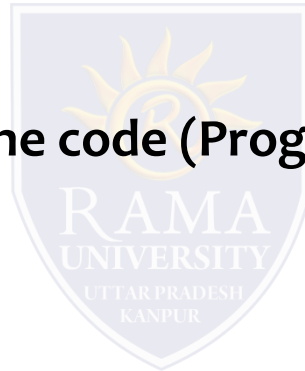
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Machine Code

Jumping to different parts of the code (Program Counter Manipulation)

Decision Tables

Machine Code

- The microprocessor understands sequences of 1's and 0's.

- The pseudo-English assembly language. How do you get from one to the other? Well, a program called an assembler takes each assembly language instruction (opcode) that you've created and finds the corresponding machine code that the processor understands as that instruction.

- Once it does that, it follows the machine code with any data that corresponds to the instruction.

- Machine code is quite detail oriented.

- The machine code for individual opcodes is different for different types of addressing
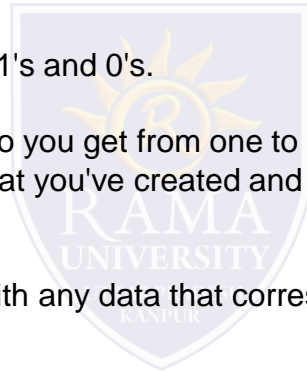
Jumping to different parts of the code (Program Counter Manipulation)

- BCC - Branch if Carry Clear
- BCS - Branch if Carry Set (Same as BLO)
- BEQ - Branch if Equal to Zero
- BGE - Branch if Greater than or Equal to Zero
- BGT - Branch if Greater than Zero
- BHI - Branch if Higher
- BHS - Branch if Higher or Same (Same as BCC)
- BLE - Branch if Less than or Equal to Zero
- BLO - Branch if Lower (Same as BCS)
- BLS - Branch if Lower or Same
- BLT - Branch if Less than Zero
- BMI - Branch if Minus
- BNE - Branch if Not Equal to Zero
- BPL - Branch if Plus
- BRA - Branch ALWAYS
- BRCLR - Branch if Bit(s) Clear
- BRN - Branch NEVER (Has same effect as NOP)
- BRSET - Branch if Bit(s) Set
- BVC - Branch if Overflow Clear
- BVS - Branch if Overflow Set

Decision Tables

A decision table is a good way to settle with different combination inputs with their corresponding outputs and also called cause-effect table.

Decision tables are very much helpful in test design technique.

It helps testers to search the effects of combinations of different inputs and other software states that must correctly implement business rules.

SIMPLIFYING DECISION TABLE

Credit limit exceeded	Y	Y	Y	Y	N	N	N	N
Prompt payer	Y	Y	N	N	Y	Y	N	N
Special Clearance	Y	N	Y	N	Y	N	Y	N
Accept order	X	-	X	-	X	X	X	X
Reject order	-	X	-	X	-	-	-	-