

## Tutorial - 4.

Addressing Mode	Effective Address	Content of AC.
Immediate operand	201.	500
Direct	500	800
Indirect	800	300
Relative	702	325
Indexed	600	900
Register	<del>400</del> —	<del>400</del> 400
Register Indirect	400	700.

/ Two address instruction.

/ immediate addressing  $\rightarrow$  effective address  $\rightarrow$  ~~500~~ 201.  
content  $\rightarrow$  500.

/ Direct  $\rightarrow$  check content of location 500  $\rightarrow$  800

/ Indirect  $\rightarrow$  check content of 800  $\rightarrow$  300.

/ Relative address  $\rightarrow$  In the indirect mode the effective address is stored in memory at address 500.

So in relative mode effective address is

$$A + PC = 500 + 202 = 702$$

content of 702  $\rightarrow$  325

/ Indexed address  $\rightarrow A + XR = 500 + 100 = 600.$

$\downarrow$

XR is given as index register content.

/ Register  $\rightarrow$  In the register mode the operand is in Register mode R1. so the <sup>content</sup> ~~operand~~ loaded into AC is 400. No effective address as directly loaded from regi.

/ Register Indirect  $\rightarrow$  In register indirect effective address will 400 so, content of AC will be 700.