Accelerating a project

- ➤ Its mean shortening the normal duration of the project schedule
- ➤ Schedule crashing indicate maximum acceleration



Why Accelerate a project

- 1. The Contractor's finish date in schedule not meet the imposed finish date of the contract.
- 2.After starting the construction ,the contractor realize that the project is behind schedule.
- 3. Sometimes, finishing the project early means—to the contractor—starting another job and making more profit.
- 4. Accelerating project may prove profitable to the contractor.



How accelerating a project

The duration of the project is equal to the duration of the critical path .Thus, to shorten the duration of the project, we must shorten the duration of the critical path.



- 1) We start by shortening the longest (critical) path.
- 2)To shorten the duration of a path, we cut the duration of an activity on the path .we choose the activity with the least cost.
- 3)If the shortened activity falls on more than one path, all the paths with the activity will also be shortened.
- 4)The further we accelerate the project ,the more paths must be shortened and the more activities must be involved.



Direct & Indirect Costs

1) Direct costs:

- a. Labor(workers)
- b. Materials, such as concrete, structural steel.
- c. Equipment ,such as bulldozers , cranes and concrete pumps.
- d. Subcontractors.
- e. Other costs, such as government permits and fees.



Direct & Indirect Costs

2) Indirect Costs:

- a. Job overhead, such as project staff, office equipment..etc
- b. Profit, usually estimated by the contractor before the project (5% to 10%).
- c. Contingency fees(for unknown events occur during the project.