## **Identifying the Forwarding Datapaths**



- Identify all stages that <u>produce</u> new values
  - EX and MEM
- Add stages after first producer as <u>sources</u> of forwarding data
  - EX, MEM, WB
- Identify all stages that really <u>consume</u> values
  - EX
- Add multiplexor for each input operand for each consumer
  - **2**
- Multiplexers have sources+1 inputs
  - EX, MEM, WB + ID (register file)