

# State a situation where real-time processing would be appropriate.

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## Definition of real-time

In real time processing the computer processes the incoming data as soon as it occurs, up-dates the transaction file and gives an immediate response that would affect the events as they happen.

There is no much difference with online processing however with real-time processing, the outcome of the processing is required immediately to influence decision making and not necessarily through online means but can be within a machine.

They react to input stimuli received from the environment, by triggering computations to generate output reactions and/or change their internal state. In order to keep control over their environment, they have to react within bounded duration.

## Situation where real-time processing would be appropriate

- a) In factories/green houses such as nuclear reaction centres to control/regulate temperature, humidity and air conditioning systems.
- b) In banking systems to update records after transactions.
- c) Markets such as stock exchange centres to adjust results of any market changes such as share prices.
- d) In machines such as aeroplanes, ships, vehicles, computers etc. to conduct a number of troubleshooting services such as breaking systems, temperature/smoke/humidity control, fuels levels etc.
- e) Air, vehicle, ship and Hotel reservation systems to avoid duplicate bookings.
- f) Automated fire extinguishing systems.
- g) Stock control systems in supermarkets and stores.
- h) Library systems to control borrowing of books, security and violation of book lending policies.