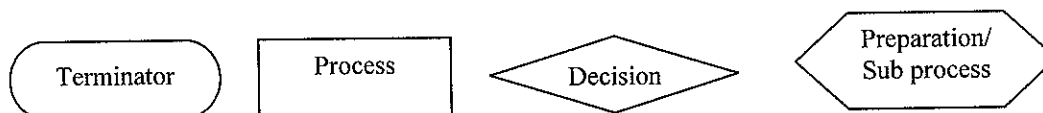## Flowchart

A flow chart is defined as a pictorial representation describing a process being studied or even used to plan stages of a project. Flow charts tend to provide people with a common language or reference point when dealing with a project or process.

Terminator	Process	Decision	Preparation/ Sub process

Three core constructs
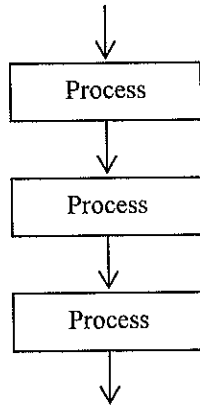
Sequence
Choice
Repetition

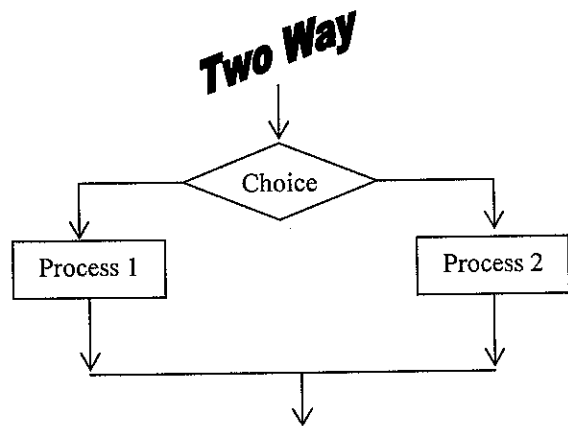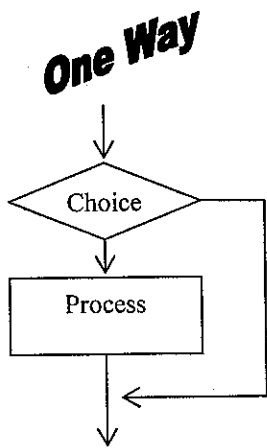Any algorithm can be represented by sequence, choice & repetition.

Steps involved in Index/counted Loops

1. Initialize the loop index to a specific value.
2. Carrying out the processing within the loop.
3. Modifying the value of the loop index.
4. Testing the current value of the loop index.

Sequence

```
            |
            v
     +-------------+
     |   Process   |
     +-------------+
            |
            v
     +-------------+
     |   Process   |
     +-------------+
            |
            v
     +-------------+
     |   Process   |
     +-------------+
            |
            v
```

Choice

One Way

```
        |
        v
      /     \
     < Choice >
      \     /
        |
        v
   +-----------+
   |  Process  |
   +-----------+
        |
        v
```

Two Way

```
              |
              v
           /     \
          < Choice >
           \     /
        /              \
       v                v
 +-----------+    +-----------+
 | Process 1 |    | Process 2 |
 +-----------+    +-----------+
       |                |
       v                v
              |
              v
```

Repetition

Pre Test

```
        |
        v
      /     \
     < Choice >
      \     /
        |
        v
   +-----------+
   |  Process  |
   +-----------+
        |
        v
```

Post Test

```
              |
              v
        +-----------+
        |  Process  |
        +-----------+
              |
              v
           /     \
          < Choice >
           \     /
              |
              v
```