Flowcharts

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Flowchart

Sequence of Instructions

PROBLEM 1: You are in front of the door of your house. The door is already locked. Enter the house and lock the door from inside.

```
Unlock door
Open door
Walk into house
Shut door
Lock door
```

Flowchart

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Unlock door
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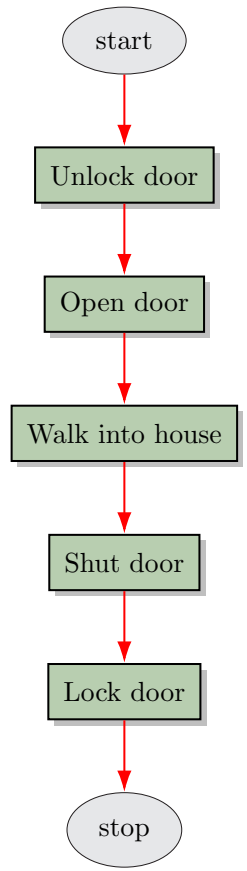

Flowchart

If branch

PROBLEM 2: You are in front of the door of your house. It is not known earlier if the door is locked or not. Enter the house and lock the door from inside.

```
Check if the door is locked
 or not
IF the check succeeds THEN DO
  Unlock door
ENDIF
```

Flowchart

If branch

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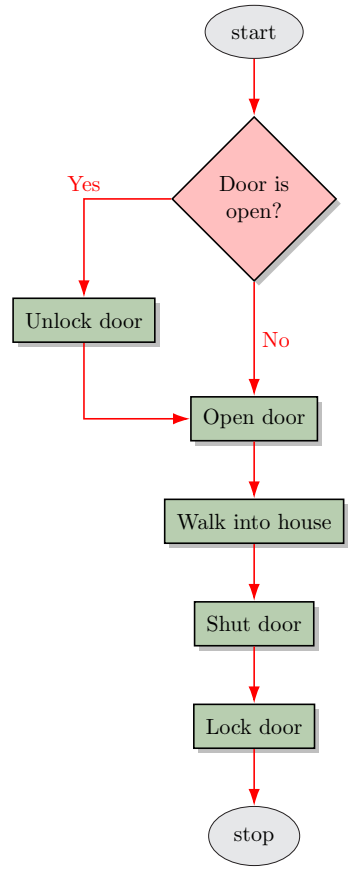

Flowchart

If-Else Branch

PROBLEM 3: We have to affix postage stamp of the following denomination to the envelope:

- Rs. 30 for speed post
- Rs. 35 for registered post

```
IF text T written on the
 given envelope E is
 "SPEED POST" THEN
    Affix Rs. 30 stamp on E
ELSE IF text T written on
  E is "REGISTERED POST" THEN
    Affix Rs. 35 stamp on E
ENDIF
```

Flowchart

If-Else Branch

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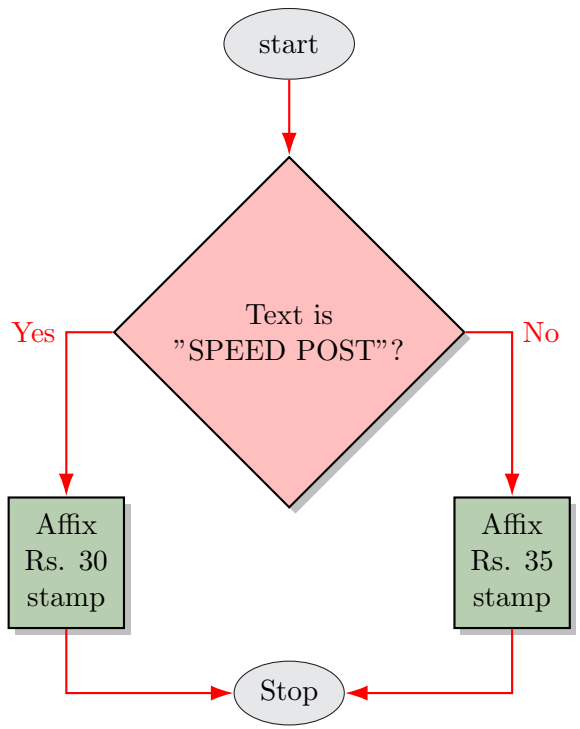


Flowchart

Loop

PROBLEM 4: You are in front of the door of your house. The door is already locked. Enter the house and lock the door from inside. Take one step at a time.

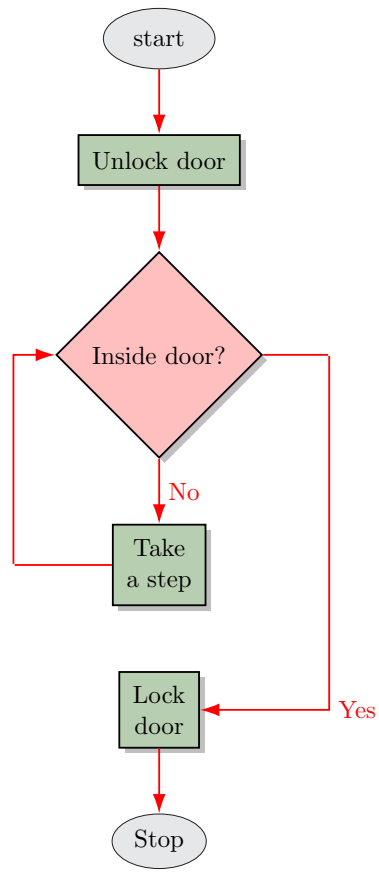
```
Unlock door
WHILE inside house is false THEN
  Take a step
DONE
Lock door
```

Flowchart

Loop

PROBLEM 4: You are in front of the door of your house. The door is already locked. Enter the house and lock the door from inside. Take one step at a time.

```
Unlock door
WHILE inside house is false THEN
  Take a step
DONE
Lock door
```



Flowchart

If-Else if-Else Branch

PROBLEM 5: Program that takes two numbers and a choice (1 for addition, 2 for multiplication) and does appropriate calculation.

```
Input n1, n2, choice
IF choice = 1 THEN
  OUTPUT n1 + n2
ELSE IF choice = 2 THEN
  OUTPUT n1 * n2
ELSE
  OUTPUT "INVALID CHOICE."
```

Flowchart

If-Else if-Else Branch

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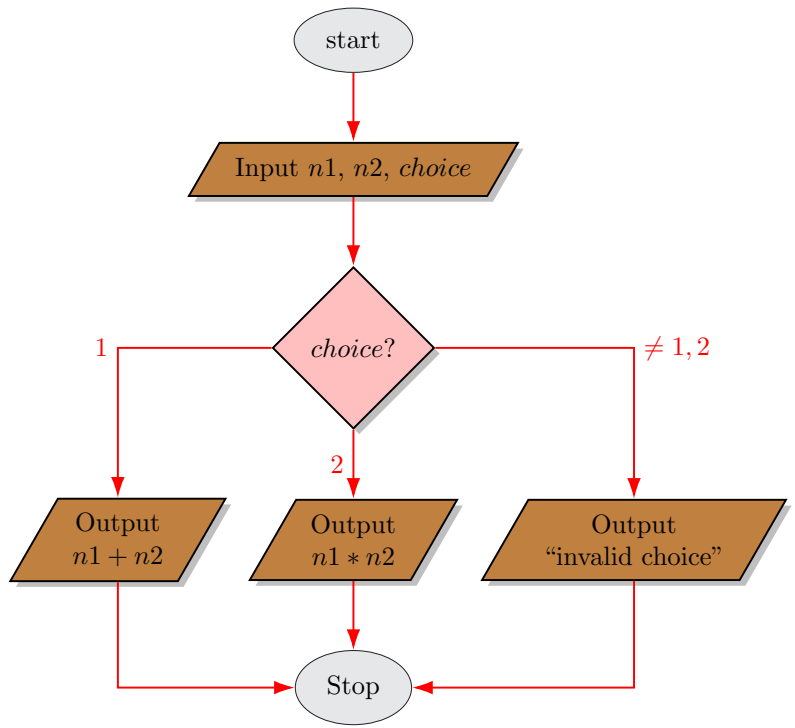
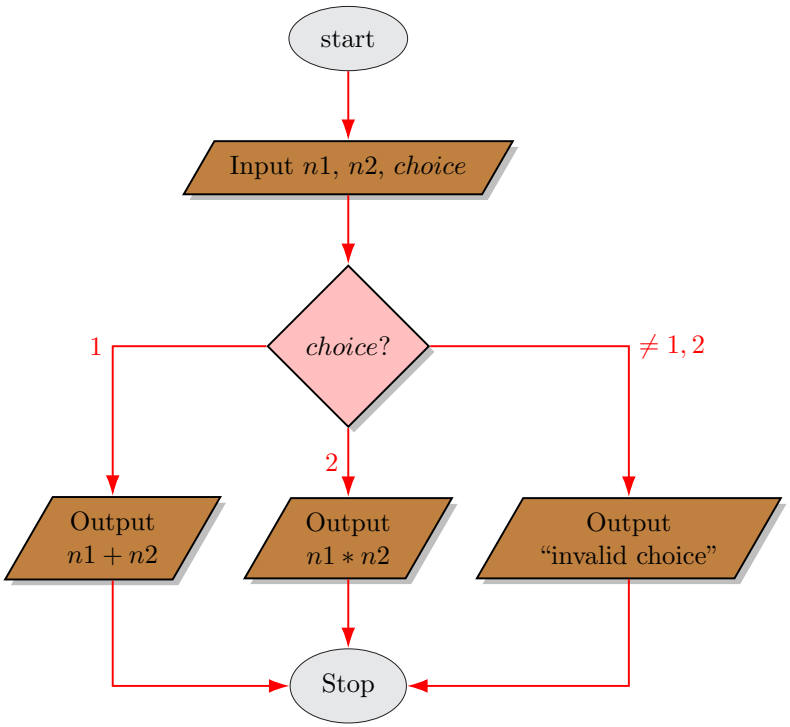


Flowchart

If-Else if-Else Branch



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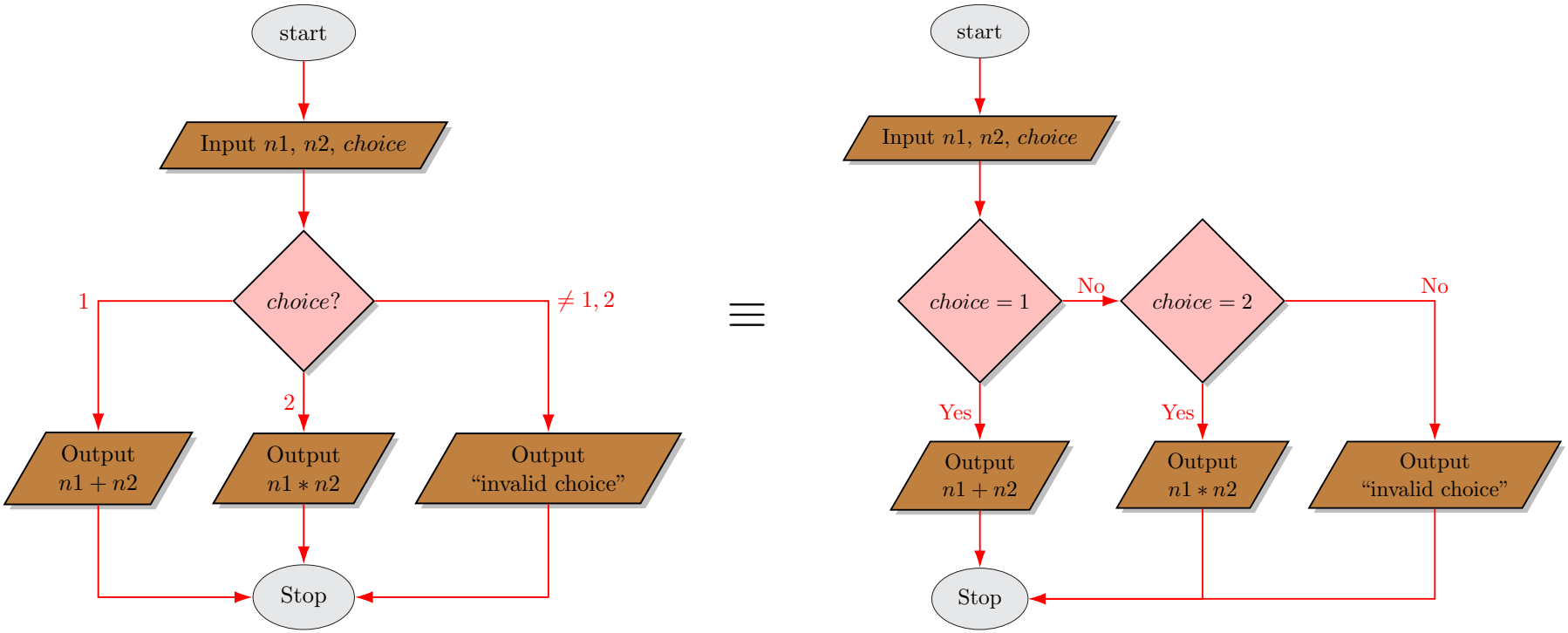
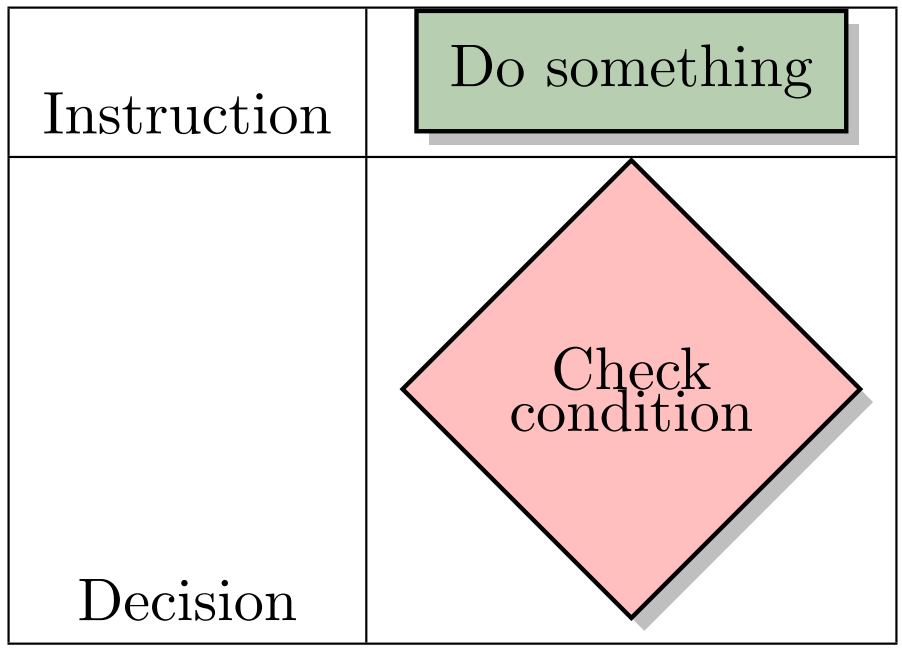
Flowchart

If-Else if-Else Branch



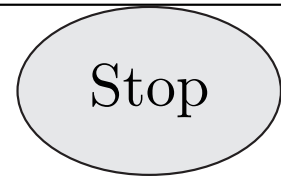
Flowchart

Building Blocks



Flowchart

Building Blocks

Input/Output	
Start/Stop	

Flowchart

Advantages

1. It helps think about the algorithm/process in a pictorial way.
2. It's not a formal language like a programming language (e.g. Python). Therefore, doesn't get stuck due to syntax errors.