

Demonstration of “grafcet2 0.1” package.

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<http://nagimov.github.com/grafcet2/>

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Contents

1 Basic Commands: \Step, \Transition, \Nop	3
2 Grafcet Caption: \caption	3
3 Multiple Lines in Description	3
4 The First Step: \FirstStep	4
5 Macro Steps: \MacroStep	4
6 Jump Steps: \Jump	4
7 Automatic Numeration	5
8 Imposed Numeration	5
9 Divergence: \Divergence	6
10 Duplication: \Fork	6
11 Loops: \Loop	7

The table of grafkets is inserted using the following command:

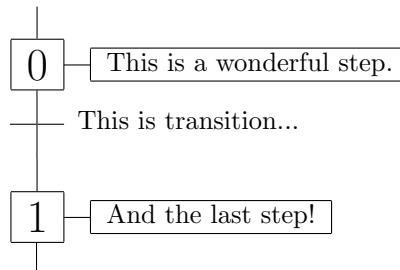
```
\listofgrafkets
```

List of Grafkets

1	How to insert grafket caption	3
2	Multiple lines description	3
3	Displaying initial step	4
4	Macro step	4
5	Jump step	4
6	Automatic numeration	5
7	Imposed numeration	5
8	Divergence	6
9	Duplication / Fork	6
10	Loops	7

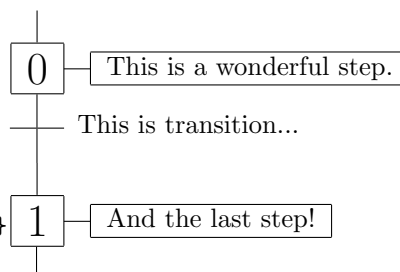
1 Basic Commands: `\Step`, `\Transition`, `\Nop`

```
\begin{grafcet}
\Step{This is a wonderful step.}
\Transition{This is transition...}
\Step{And the last step!}
\Nop
\end{grafcet}
```



2 Grafcet Caption: `\caption`

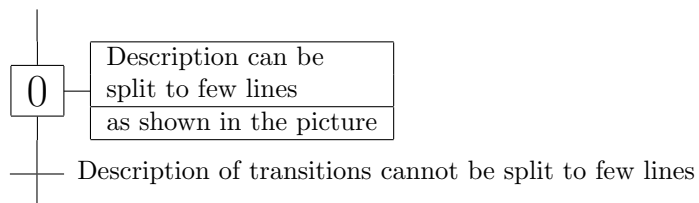
```
\begin{grafcet}
\Step{This is a wonderful step.}
\Transition{This is transition...}
\Step{And the last step!}
\Nop
\caption{How to insert grafcet caption}
\end{grafcet}
```



Grafkets 1: How to insert grafcet caption

3 Multiple Lines in Description

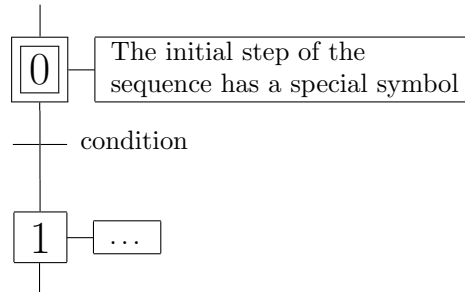
```
\begin{grafcet}
\Step{Description can be \\
      split to few lines \\ \hline
as shown in the picture}
\Transition{Description of
            transitions cannot
            be split to few lines}
\caption{Multiple lines description}
\end{grafcet}
```



Grafkets 2: Multiple lines description

4 The First Step: `\FirstStep`

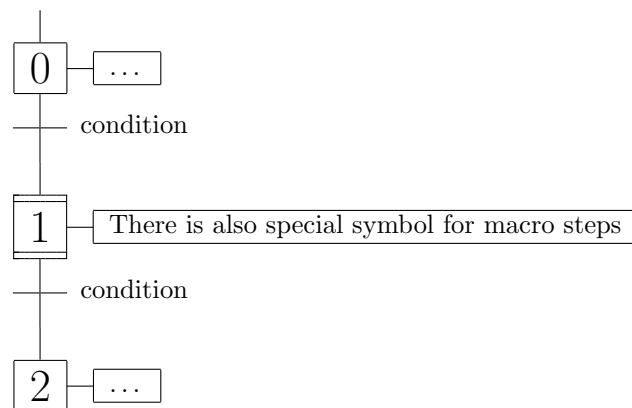
```
\begin{grafcet}
\FirstStep{The initial step of the \
sequence has a special symbol}
\Transition{condition}
\Step{\ldots}
\Nop
\caption{Initial Step}
\end{grafcet}
```



Grafcets 3: Displaying initial step

5 Macro Steps: `\MacroStep`

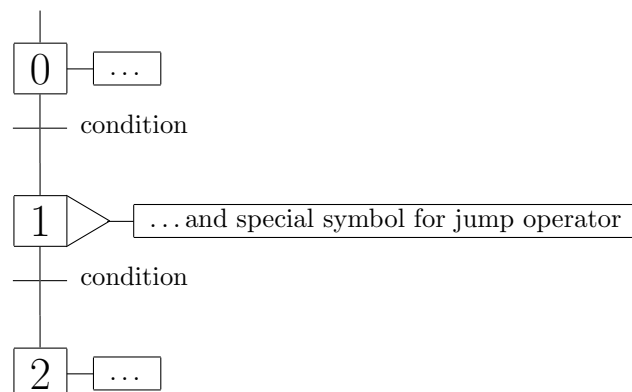
```
\begin{grafcet}
\Step{\ldots}
\Transition{condition}
\MacroStep{There is also special
symbol for macro steps}
\Transition{condition}
\Step{\ldots}
\caption{Macro step}
\end{grafcet}
```



Grafcets 4: Macro step

6 Jump Steps: `\Jump`

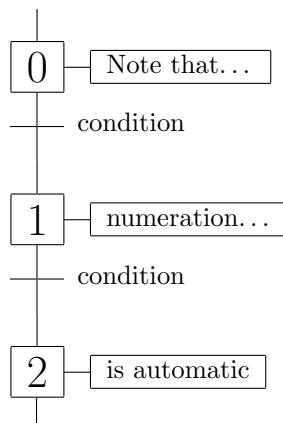
```
\begin{grafcet}
\Step{\ldots}
\Transition{condition}
\Jump{\ldots and special symbol
for jump operator}
\Transition{condition}
\Step{\ldots}
\caption{Jump step}
\end{grafcet}
```



Grafcets 5: Jump step

7 Automatic Numeration

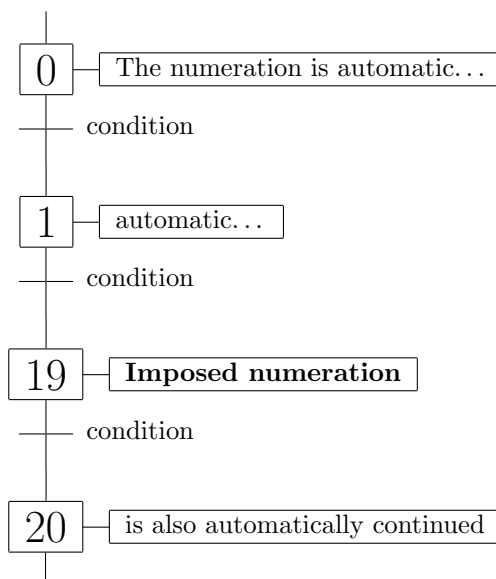
```
\begin{grafcet}
\Step{Note that\ldots}
\Transition{condition}
\Step{numeration\ldots}
\Transition{condition}
\Step{is automatic}
\Nop
\caption{Automatic numeration}
\end{grafcet}
```



Grafkets 6: Automatic numeration

8 Imposed Numeration

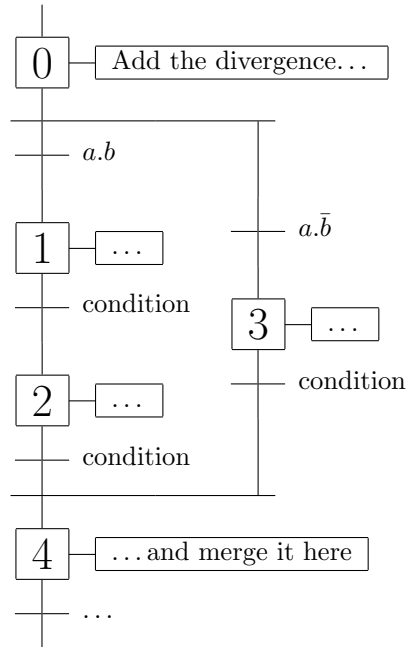
```
\begin{grafcet}
\Step{The numeration
      is automatic\ldots}
\Transition{condition}
\Step{automatic\ldots}
\Transition{condition}
\Step[19]{\textbf{Imposed
          numeration}}
\Transition{condition}
\Step{is also automatically
      continued}
\Nop
\caption{Imposed numeration}
\end{grafcet}
```



Grafkets 7: Imposed numeration

9 Divergence: \Divergence

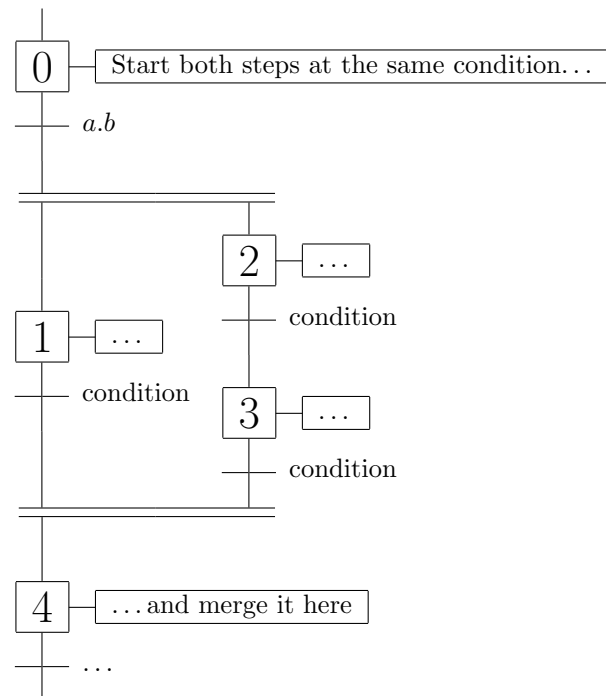
```
\begin{grafcet}
\Step{Add the divergence\ldots}
\Divergence
{
  \Transition{$a.b$}
  \Step{\ldots}
  \Transition{condition}
  \Step{\ldots}
  \Transition{condition}
}
{
  \Transition{$a.\bar{b}$}
  \Step{\ldots}
  \Transition{condition}
}
\Step{\ldots and merge it here}
\Transition{\ldots}
\caption{Divergence}
\end{grafcet}
```



Grafkets 8: Divergence

10 Duplication: \Fork

```
\begin{grafcet}
\Step{Start both steps
      at the same condition\ldots}
\Transition{$a.b$}
\Fork
{
  \Step{\ldots}
  \Transition{condition}
}
{
  \Step{\ldots}
  \Transition{condition}
  \Step{\ldots}
  \Transition{condition}
}
\Step{\ldots and merge it here}
\Transition{\ldots}
\caption{Duplication / Fork}
\end{grafcet}
```



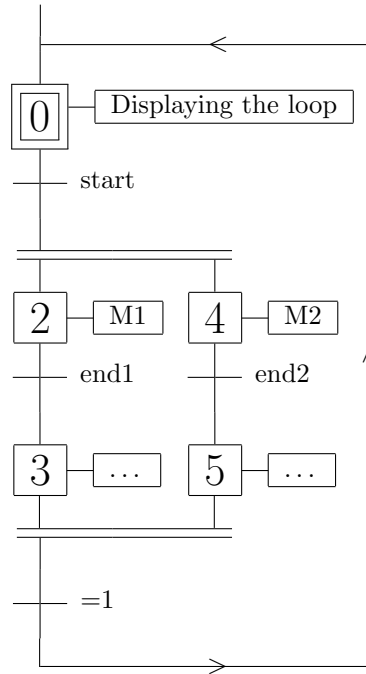
Grafkets 9: Duplication / Fork

11 Loops: \Loop

```

\begin{grafcet}
\Loop{
  \FirstStep{Displaying the loop}
  \Transition{start}
  \Fork
  {
    \Step[2]{M1}
    \Transition{end1}
    \Step{\ldots}
    \Nop
  }
  {
    \Step{M2}
    \Transition{end2}
    \Step{\ldots}
    \Nop
  }
  \Transition{=1}
}
\caption{Loops}
\end{grafcet}

```



Grafkets 10: Loops