The CalcTeX installation

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1 Instalation

For CalcTEX instalation you should copy a following example or any other source example http://sg.bzip.pl/CalcTeX/install-en/install-CalcTeX.tgz to assure that on your computer is installed: python, TEX and/or LATEX. if so, you should extract this source `tar -xvvf install-CalcTeX.tgz` and will be creted a new folder `install-CalcTeX`. Go into this folder `cd install-CalcTeX` and run `go` script i.e.: `sh go` or `sh go mas` then will be genereted a main.pdf. file included all calculation defined in all `*calc.tex` or `*mask*calc.tex` files.
Have a nice join!
Following is a simply example of CalcTEX input file.

1.1 Kinetic energy

An $m_a := 0.725 \cdot \text{ton}$ automobile has a kinetic energy of $E_k := 145 \cdot \text{kJ}$ as it travels along a highway. What is the car's speed?

1.1.1 Calculation Kinetic energy

List the given and unknown values.
Given: mass, $m_a \cdot \text{kg}^{-1} = 725.0$
kinetic energy, $E_k \cdot \text{MJ}^{-1} = 0.145$
Unknown: speed, $v = ?$ m/s

$$E_k := \frac{m_a \cdot v^2}{2} \quad \Leftrightarrow \quad v := \sqrt{\frac{2 \cdot E_k}{m_a}}; \quad v \cdot \left(\frac{\text{m}}{\text{s}}\right)^{-1} = 20.0 \tag{1.1.1}$$

The car's speed is $v \cdot (\text{m/s})^{-1} = 20.0$, that is equavalent to $v \cdot (\text{ft/s})^{-1} = 65.6167979003$, $v \cdot (\text{km/hr})^{-1} = 72.0$.