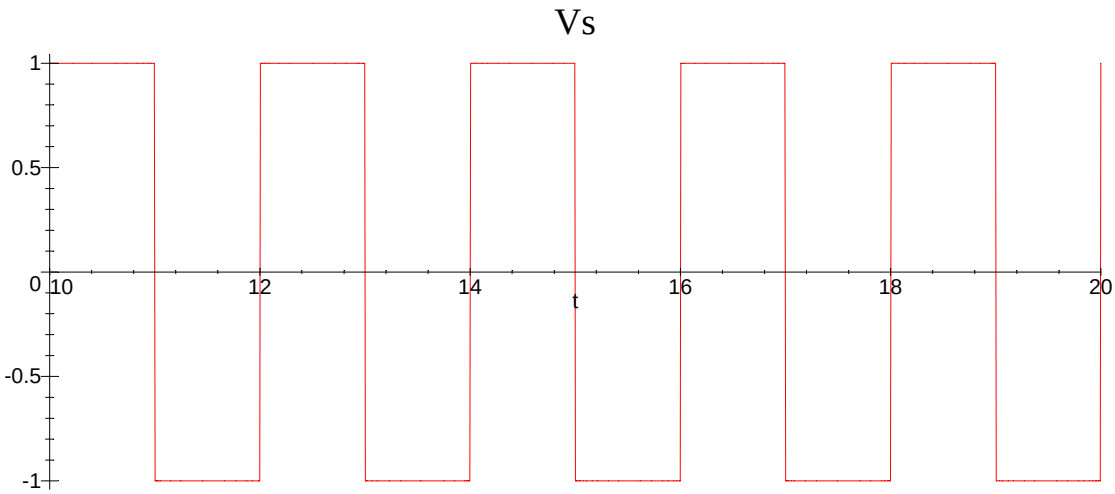
```
STUDENT > restart;
STUDENT > with(inttrans):
```
[*addtable*, *fourier*, *fouriercos*, *fouriersin*, *hankel*, *hilbert*, *invfourier*, *invhilbert*, *invlaplace*, *laplace*, *mellin*]

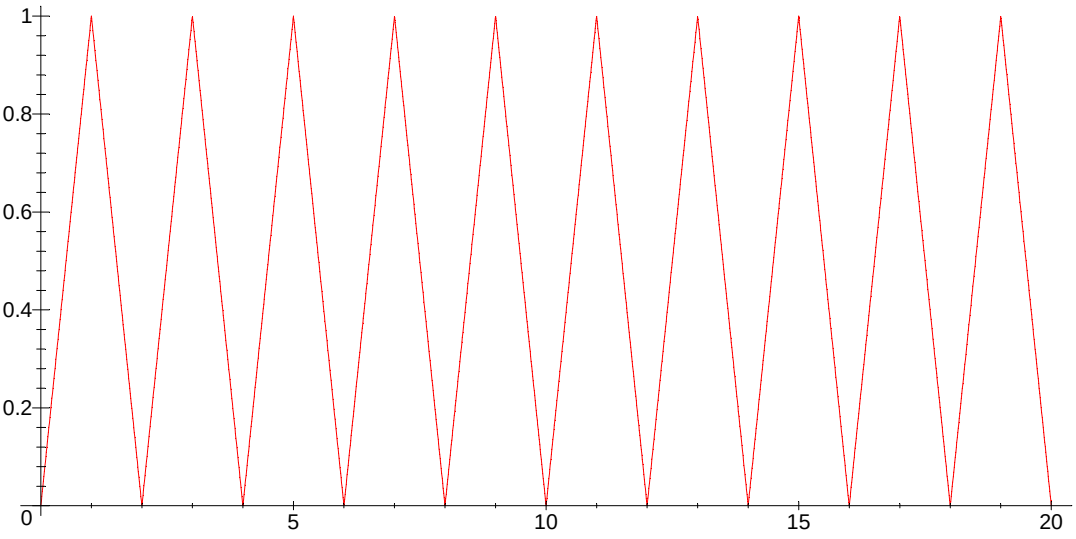
```
STUDENT > DiffEqn:=Vs(t)=R*i(t)+L*diff(i(t),t);
```

$$DiffEqn := \mathrm{Vs}(t) = R\,\mathrm{i}(t) + L\left(\frac{\partial}{\partial t}\mathrm{i}(t)\right)$$

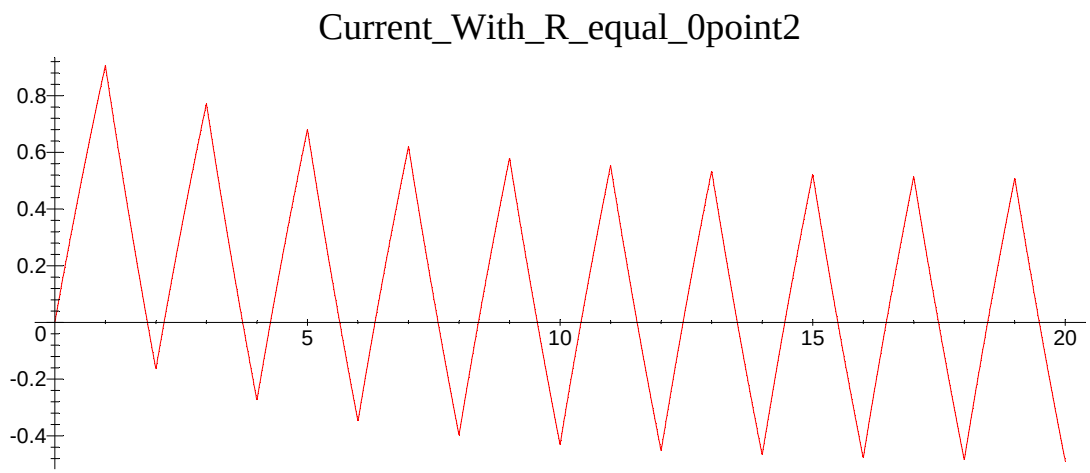
```
STUDENT > Vs(t):=Heaviside(t)+sum(2*(-1)^(k mod
          2)*Heaviside(t-k),k=1..20):
STUDENT > plot(Vs(t),t=10..20,title='Vs');
```




```
STUDENT > plot(rhs(dsolve({subs({L=1,R=0},DiffEqn),i(0)=0},i(t))),t=
          0..20,title='Current_With_R_equal_0',numpoints=2000);
```




```
STUDENT > plot(rhs(dsolve({subs({L=1,R=0.2},DiffEqn),i(0)=0},i(t))),
          t=0..20,title='Current_With_R_equal_0point2',numpoints=200
          0);
```




```
STUDENT > plot(rhs(dsolve({subs({L=1,R=10},DiffEqn),i(0)=0},i(t))),t
          =0..20,title='Current_With_R_equal_10',numpoints=2000);
```