



Esercitazione:

Strumento Virtuale (VI) per la generazione di segnali simulati sinusoidali



Free 6-Month Evaluation of LabVIEW Student Edition for at-home learning

<https://forums.ni.com/t5/General-Academic-Projects/Free-6-Month-Evaluation-of-LabVIEW-Student-Edition-for-at-home/ta-p/3497362>

*This license works on Windows OS only



$$y(t) = A \cos(\omega t + \varphi)$$

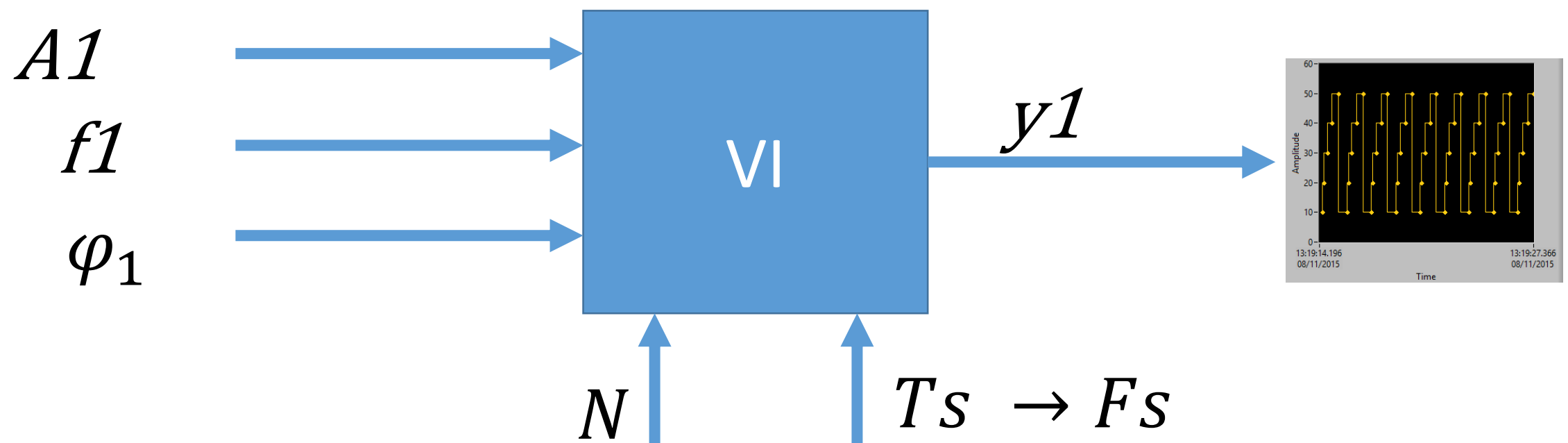
$$\omega = 2\pi \cdot f$$

$$y(t) = A \cos(2\pi f t + \varphi)$$

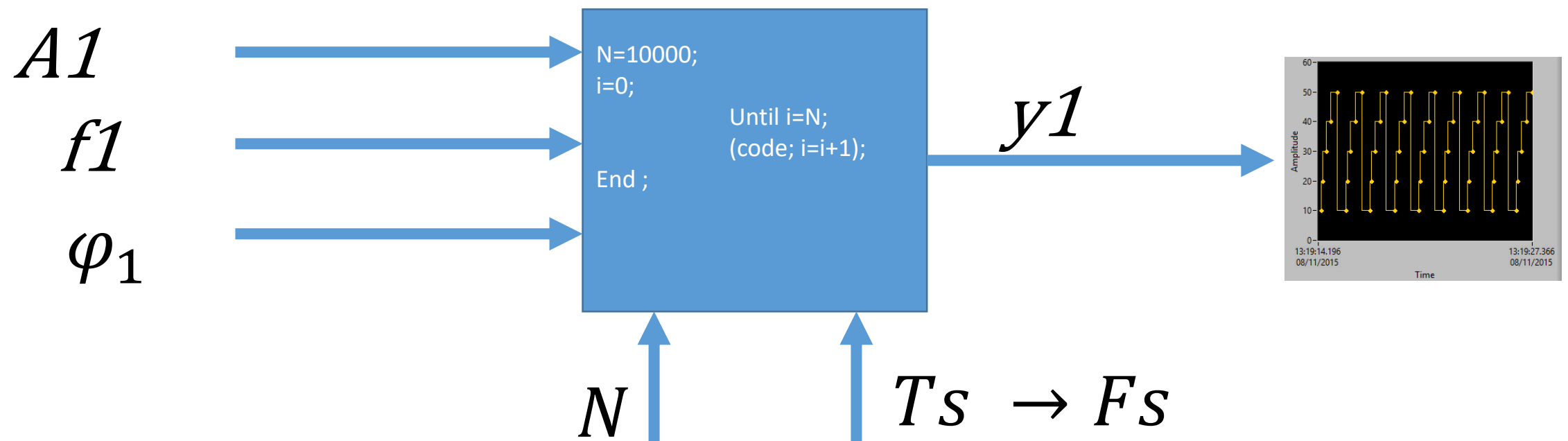
$$t \rightarrow iTs$$

$$y(iTs) = A \cos(2\pi f iTs + \varphi)$$

$$y_1(iTs) = A_1 \cos(2\pi f_1 iTs + \varphi_1)$$



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Cosine Function

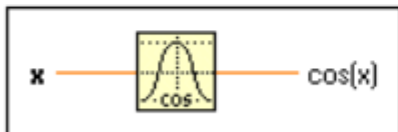
Owning Palette: [Trigonometric Functions](#)

Requires: Base Development System

Computes the cosine of x , where x is in radians.

The connector pane displays the default data types for this polymorphic function.

Example



Add to the block diagram



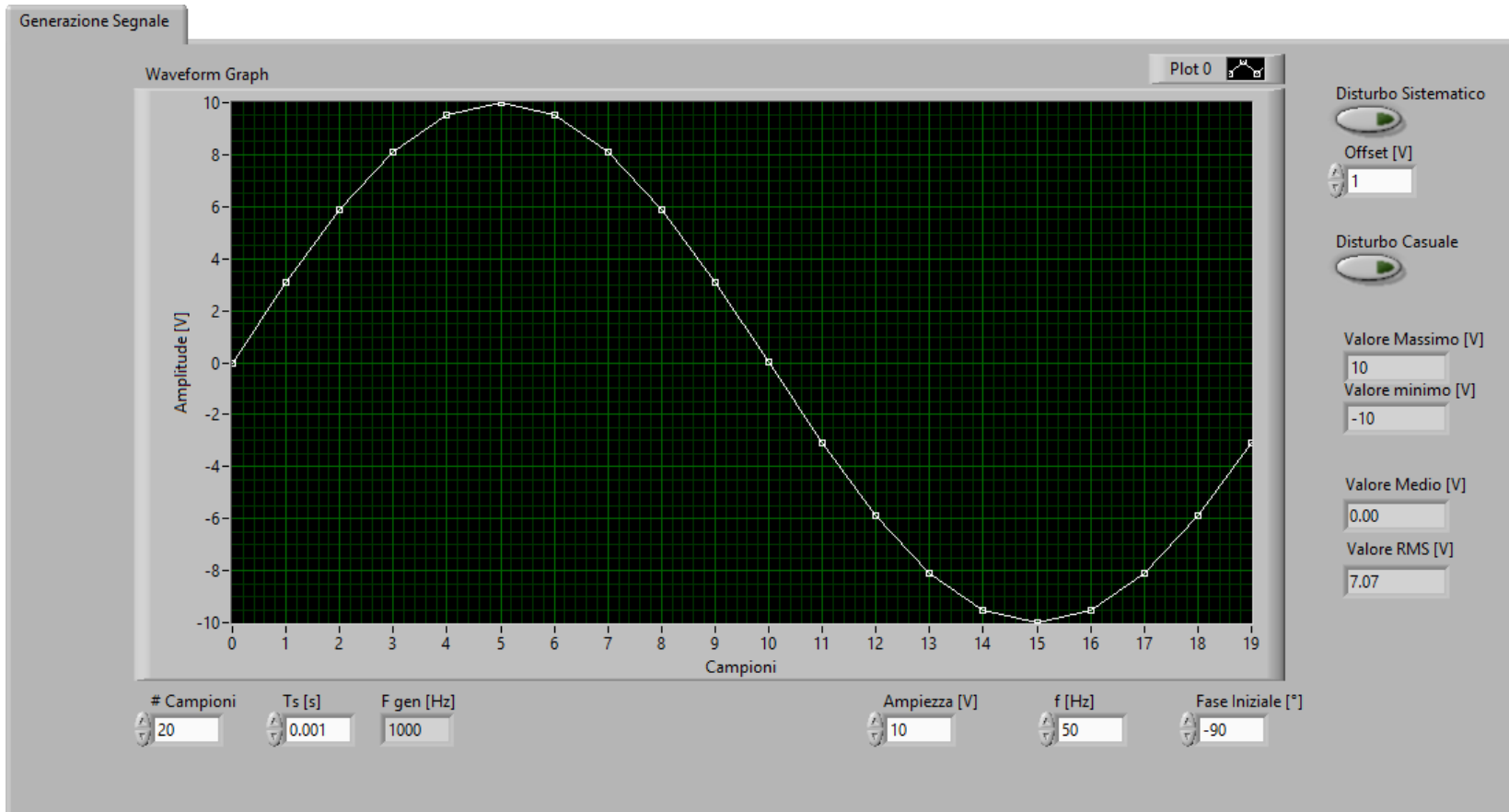
Find on the palette

degrees to radians

$(x/180.0)*pi$



$$y_1(iTs) = A_1 \cos(2\pi f_1 iTs + \varphi_1)$$





Generazione Segnale

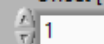
Waveform Graph

Plot 0

Disturbo Sistemático



Offset [V]



1

Disturbo Casuale



Valore Massimo [V]

10

Valore minimo [V]

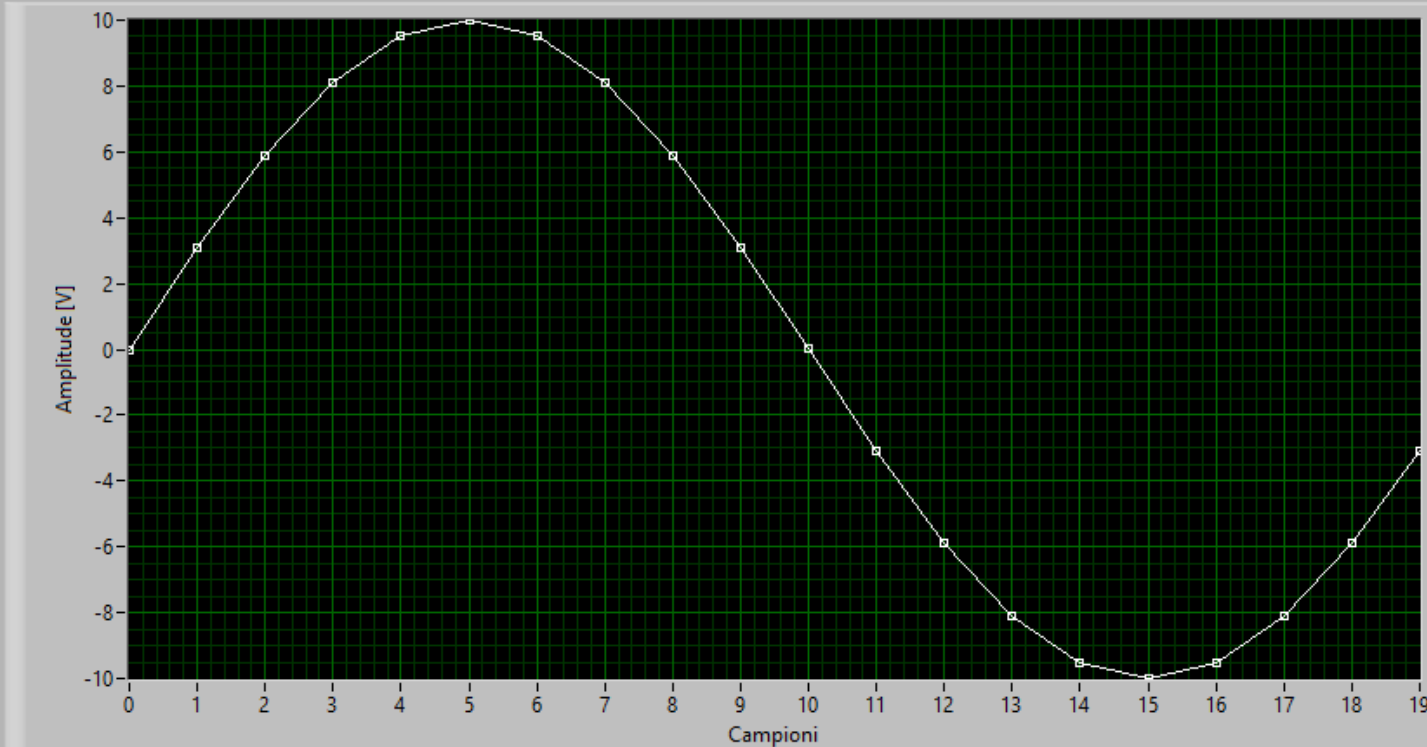
-10

Valore Medio [V]

0.00

Valore RMS [V]

7.07



Campioni

20

Ts [s]

0.001

F gen [Hz]

1000

Ampiezza [V]

10

f [Hz]

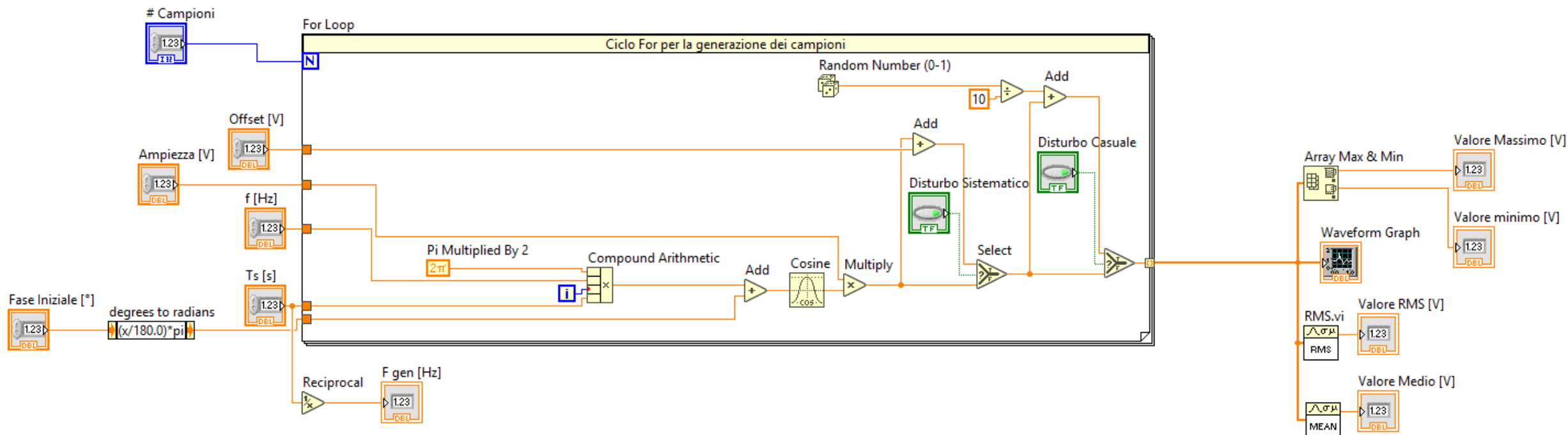
50

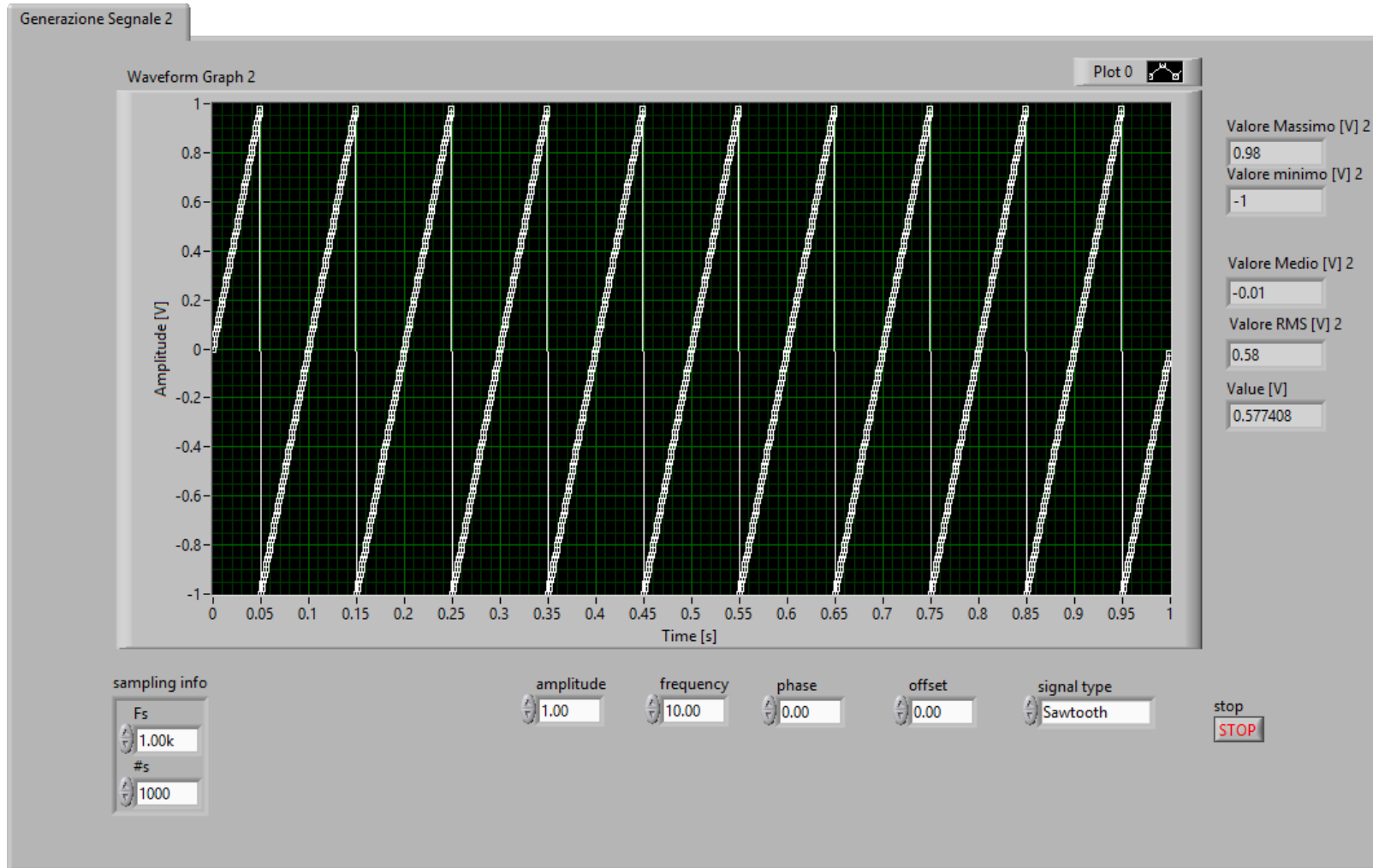
Fase Iniziale [°]

-90



Programma per la generazione di un segnale cosinusoidale





Tab Control 2

