# MERNI INFORMACIONI SISTEMI

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## Učenje kroz primere

NILabVIEW   2014 (32-bit)     Image: State of the sta	LADVIEW - •
LabVIEW 2014	Search Q
Create Project	Open Existing
Recent Project Templates Blank VI	All Recent Files       SasaStojanovic.vi       Acquiring a Signal.vi
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LabVIEW News   Merni informaci	oni sistemi

#### 2.Select File»New to display the New dialog box



VI»From Template»Tutorial (Getting Started)» Generate and Display

#### 5. block diagram window & front panel window



# click front panel **Run** button, click front panel **STOP** button



#### Adding a Control to the Front Panel

#### in the front panel window View»Controls Palette

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File	Edit	View	Project	Operate	Tools	Window	Help		
	₿	Co	ntrols Pale	ette				■ 100 - 100	▼
Functions Palette Tools Palette Quick Drop Breakpoint Manager Probe Watch Window Event Inspector Window Error List Load and Save Warning List VI Hierarchy LabVIEW Class Hierarchy Browse Relationships Bookmark Manager This VI in Project			w	Ctrl+Sp Ctrl+L	ace	Sine	A		
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#### Click the Numeric Controls icon to display the Numeric Controls palette

Click the **Knob** control on the **Numeric Controls** palette to attach the control to the cursor, and then add the knob to the front panel



Right-click the Simulate Signal Express VI and select Properties from the shortcut menu to display the Configure Simulate Signal dialog box

	Þ.	Generate and Display [GenerateDisplay 1.vi] Block Diagram *
	File	Edit View Project Operate Tools Window Help
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Simulate Signal		1. Configure the Simulate Signal Express VI by double-clicking it.         Image: Simulate Signal Express VI by double-clicking it.         Visible Items

1. Configure the Simulate Signal Express VI by double-clicking it.

	Configure Simulate Sign	al [Simulate Signal]
Signal		Result Preview
Signal type		
Sine	~	0.5-
Frequency (Hz)	Phase (deg)	۳.0- ۳
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Amplitude	Offset Duty cycle (%)	Amp
1	0 50	-0.5-
Add noise		-1-
Noise type	in .	0 0.099
Uniform White No	bise	Time
Noise amplitude	Seed number Trials	Time Stamps
0.6	-1 1	Relative to start of measurement
Timing		O Absolute (date and time)
Samples per second	(Hz)	Parat Cinnal
1000	Simulate acquisition timing	Reset signal     Peret phase cood and time stamps
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gure Simulate	<b>Signal</b> dialog box	OK Cancel Help

Signal       Signal type         Signal type       Signal type         Noise type       Signal type         Noise type       Signal type         Signal dialog box       Signal type									
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Signal dialog box					Sawtooth				
Signal dialog box OK Cancel Help	conliguration a	and close th	ie Config	ure Simulate					
	Signal dialog b	хос			ок	Cancel Help			



Move the cursor over the down arrows at the bottom of the Simulate Signal Express VI. The down arrows indicate you can reveal hidden inputs and outputs by extending the border of the Express VI

#### Wiring Objects on the Block Diagram



On the block diagram, move the cursor over the Knob terminal Use the Wiring tool to wire objects together on the block diagram.

File»Save to save the VI



front panel, Run button, Move the cursor over the knob, hold the mouse button down, and turn the knob to adjust the amplitude of the sawtooth wave. Click the STOP button, shown below, to stop the VI





Click the wire. Press the <Delete> key to delete this wire View» Functions Palette



(1							
Input	Label	Home	Ba	ckspace	Clear		End
X1	X1						
X2	X2	e	**	log	In	mod	min
X3	X3	Pi	sqrt	log2	exp	rem	max
X4	X4	7	8	9	1	sin	abs
X5	X5	4	5	6	*	cos	int
X6	X6	1	2	3	-	tan	sign
X7	X7	0		E	+	(	)
X8	X8	More	Functions				~

The Configure Formula dialog box appears when you place the Express VI on the block diagram



On the **Arithmetic & Comparison palette**, select the **Formula** Express VI, shown below, and place it on the block diagram between the Simulate Signal Express VI and the Waveform Graph terminal

Sawtooth	*1 <b>d</b>						
Input	Label	Home	Ba	ckspace	Clear		End
X1	Sawtooth		**	lan		mad	min
X2	X2	e		log	IN	moa	min
X3	X3	Pi	sqrt	log2	exp	rem	max
X4	X4	7	8	9	/	sin	abs
X5	X5	4	5	6	*	cos	int
X6	X6	1	2	3	-	tan	sign
X7	X7	0		E	+	(	)
X8	X8						_
		More	Functions				~









#### Customizing a Knob Control

Label Caption Visible Amplitude Enabled Disabled Disabled & grayed Caption Caption Visible Visible Size Height Width 48 48	_	
Amplitude       Enabled       Disabled       Disabled & grayed		
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□ Snap to mouse Show value tip strip		

#### Customizing a Knob Control

Knob Properties: Knob							
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<ul> <li>Enabled State</li> <li>Enabled</li> <li>Disabled</li> <li>Disabled</li> </ul>	& grayed		Size Heigl 4	ht Width			
Needle 1 Need Lock at and n	V Ile color t minimum naximum o mouse	Shov	v digital o now radix now incre v value tip	Add [ lisplay(s) ment/decrement b o strip	Delete		
				ок си	ncel Help		

#### Customizing a Knob Control



#### Customizing a Waveform Graph

Graph Properties: Waveform Graph							
Appearance	Display Format	Plots	Scales	Cursors	Documentation	4	•
Label Visible Waveform	Graph		Capti	on sible			
Enabled Stat Enabled Disabled Disabled	e & grayed		Size Heigł 21	nt V 6	/idth 336		
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Show c	ursor legend			Option	al plane lines	lelp	Ņ

#### Customizing a Waveform Graph

Þ.		동 Graph I	-25.0- -50.0- Proper	ties: Wa	veform Graph	×		
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•					ОК	Cancel Help		l,
<ul> <li>Reset</li> </ul>	t Signal							

#### Shortcuts

Shortcut	Function
<ctrl-r></ctrl-r>	Runs a VI.
<ctrl-z></ctrl-z>	Undoes the last action.
<ctrl-e></ctrl-e>	Switches between the block diagram and the front panel window.
<ctrl-s></ctrl-s>	Saves a VI.

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#### Ova prezentacija je nekomercijalna.

Slajdovi mogu da sadrže materijale preuzete sa Interneta, stručne i naučne građe, koji su zaštićeni Zakonom o autorskim i srodnim pravima. Ova prezentacija se može koristiti samo privremeno tokom usmenog izlaganja nastavnika u cilju informisanja i upućivanja studenata na dalji stručni, istraživački i naučni rad i u druge svrhe se ne sme koristiti – Član 44 - Dozvoljeno je bez dozvole autora i bez plaćanja autorske naknade za nekomercijalne svrhe nastave: (1) javno izvođenje ili predstavljanje objavljenih dela u obliku neposrednog poučavanja na nastavi; - ZAKON O AUTORSKOM I SRODNIM PRAVIMA ("Sl. glasnik RS", br. 104/2009 i 99/2011)