

16. ožujka 2016. od 9:00 do 11:00



Državno natjecanje / Osnovna škola (8. razred)
Algoritmi (Logo)

SLUŽBENI TEST PRIMJERI



Agencija za odgoj i obrazovanje
Education and Teacher Training Agency



HRVATSKI SAVEZ
INFORMATIČARA



Ministarstvo znanosti,
obrazovanja i sporta



HRVATSKA
ZAJEDNICA
TEHNIČKE
KULTURE

Zadatak 1: Mreza

30 bodova

	Primjer	Slika	Bodovi
Test 1	CS MREZA 3 3 30 0	Slika 1.1	3
Test 2	CS MREZA 5 2 25 0	Slika 1.2	3
Test 3	CS MREZA 4 7 20 0	Slika 1.3	3
Test 4	CS MREZA 3 3 30 20	Slika 1.4	3
Test 5	CS MREZA 4 5 25 30	Slika 1.5	3
Test 6	CS MREZA 1 6 15 30	Slika 1.6	3
Test 7	CS MREZA 7 1 15 10	Slika 1.7	3
Test 8	CS MREZA 6 4 20 10	Slika 1.8	3
Test 9	CS MREZA 5 5 10 40	Slika 1.9	3
Test 10	CS MREZA 10 5 10 10	Slika 1.10	3

Napomena: Bodovi se dodjeljuju ako je lik ispravno nacrtan.

Zadatak 2: Signal

40 bodova

	Primjer	Slika	Bodovi
Test 1	CS SIGNAL "01 50 0	Slika 2.1	4
Test 2	CS SIGNAL "0110 80 0	Slika 2.2	4
Test 3	CS SIGNAL "010101 80 0	Slika 2.3	4
Test 4	CS FD 100 SIGNAL "011010 30 0	Slika 2.4	4
Test 5	CS SIGNAL "01 50 30	Slika 2.5	4
Test 6	CS SIGNAL "0100 80 10	Slika 2.6	4
Test 7	CS SIGNAL "011111 80 40	Slika 2.7	4
Test 8	CS SIGNAL "0010 80 60	Slika 2.8	4
Test 9	CS SIGNAL "000111001101 30 10	Slika 2.9	4
Test 10	CS FD 100 SIGNAL "0100110001110 30 10	Slika 2.10	4

Napomena: Bodovi se dodjeljuju ako je lik ispravno nacrtan.

Zadatak 3: Dubine

60 bodova

	Primjer	Izlaz	Bodovi
Test 1	SHOW DUBINE [1 1 1 1 1]	[1 1 1 1 1]	6
Test 2	SHOW DUBINE [1 2 1 2 1]	[1 [2] 1 [2] 1]	6
Test 3	SHOW DUBINE [2 2 2 1 1 2 1 2 2 1 1 2]	[[2 2 2] 1 1 [2] 1 [2 2] 1 1 [2]]	6
Test 4	SHOW DUBINE [1 2 3 1 2]	[1 [2 [3]] 1 [2]]	6
Test 5	SHOW DUBINE [3 3 2 1 3 2 3 3 3 2 2]	[[[3 3] 2] 1 [[3] 2 [3 3 3] 2 2]]	6
Test 6	SHOW DUBINE [4 3 2 3 3 2 4 2 3 4]	[[[[4] 3] 2 [3 3] 2 [[4]] 2 [3 [4]]]]	6
Test 7	SHOW DUBINE [5 4 3 2]	[[[[[5] 4] 3] 2]]	6
Test 8	SHOW DUBINE [3 6 6 5 4 5 5 6 5 1 2 5 2]	[[[3 [[6 6] 5] 4 [5 5 [6] 5]]] 1 [2 [[5]]] 2]]	6
Test 9	SHOW DUBINE [6 7 5 6 7 7 6 3 3 2 1 5 5 5 2 1]	[[[[[6 [7]] 5 [6 [7 7] 6]]] 3 3] 2] 1 [[[[5 5 5]]] 2] 1]	6
Test 10	SHOW DUBINE [3 2 4 4 7 6 8 8 7 6 2 3 3 3 5 3]	[[[3] 2 [[4 4 [[7] 6 [[8 8] 7] 6]]] 2 [3 3 3 [[5]] 3]]]	6

Napomena: Bodovi se dodjeljuju ako je ispis točan i nije se dogodila greška.

Zadatak 4: Flappy

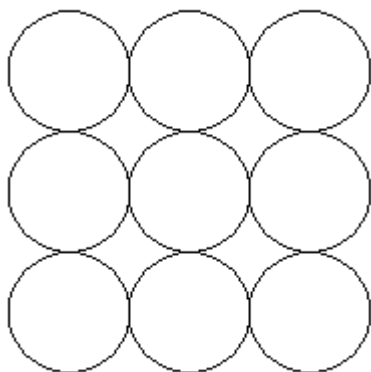
70 bodova

	Primjer	Izlaz	Slika	Bodovi
Test 1	CS FLAPPY 75 10 50 200 [[70 20]]	[70 20] 154.057	Slika 4.1	6
Test 2	CS FLAPPY 75 20 40 180 [[140 30] [30 140] [45 30]]	[140 30] [30 140] [45 30] 548.769	Slika 4.2	6
Test 3	CS FLAPPY 40 20 10 250 [[120 120] [50 180] [180 30] [120 120]]	[120 120] [50 180] [180 30] [120 120] 506.924	Slika 4.3	8
Test 4	CS FLAPPY 40 20 10 250 [[120 120] [50 180] [180 30] [90 140] [120 120]]	[120 120] [50 180] [180 30] [90 140] [120 120] 616.797	Slika 4.4	8
Test 5	CS FLAPPY 80 10 70 250 [[100 100] [120 80] [20 180]]	[120 80] [20 180] [100 100] 563.662	Slika 4.5	6
Test 6	CS FLAPPY 40 15 10 150 [[70 70] [20 120] [40 80] [100 40]]	[20 120] [100 40] [40 80] [70 70] 422.227	Slika 4.6	6
Test 7	CS FLAPPY 30 15 10 250 [[80 130] [45 45] [50 75] [110 110] [160 20]]	[80 130] [160 20] [50 75] [45 45] [110 110] 438.961	Slika 4.7	6
Test 8	CS FLAPPY 30 15 10 250 [[50 100] [120 70] [95 130] [160 20] [100 50]]	[120 70] [50 100] [160 20] [95 130] [100 50] 491.507	Slika 4.8	8
Test 9	CS FLAPPY 20 15 10 250 [[35 200] [55 180] [75 160] [95 140] [110 120] [130 100]]	[35 200] [130 100] [55 180] [110 120] [75 160] [95 140] 516.122	Slika 4.9	8
Test 10	CS FLAPPY 20 15 10 250 [[200 30] [40 190] [180 50] [60 170] [160 70] [80 160]]	[160 70] [60 170] [200 30] [40 190] [180 50] [80 160] 822.200	Slika 4.10	8

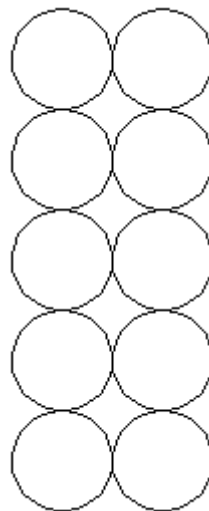
Napomena: 50% bodova na svakom test primjeru se dodjeljuje ako je točan ili ispis ili je lik ispravno nacrtan.
Rješenja se zaokružuju na 3 decimale.

Slike 1: Mreza

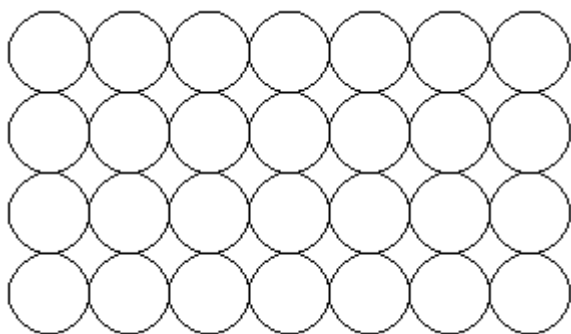
Slika 1.1



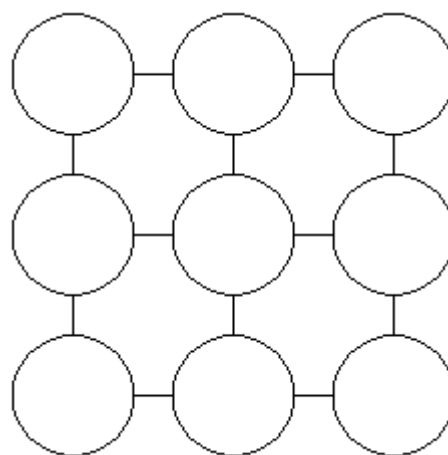
Slika 1.2



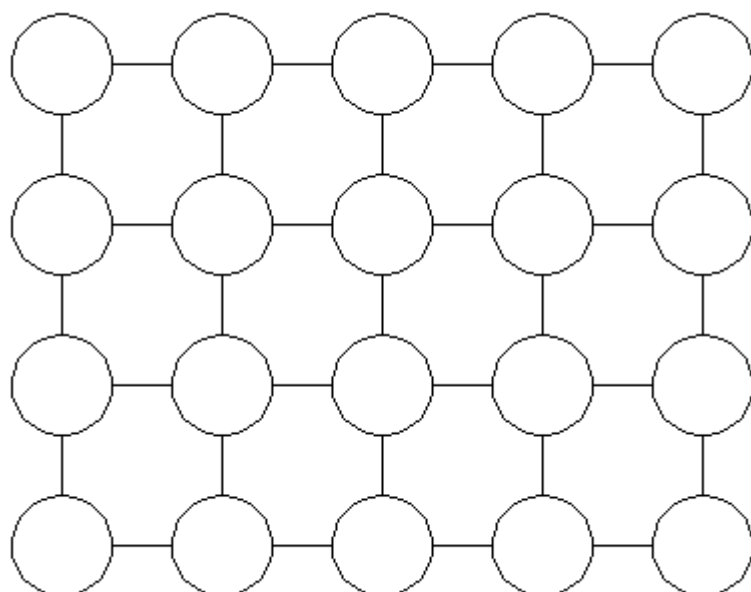
Slika 1.3



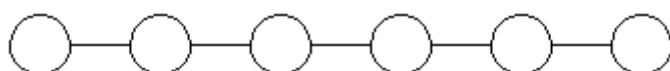
Slika 1.4



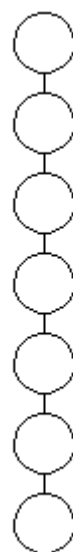
Slika 1.5



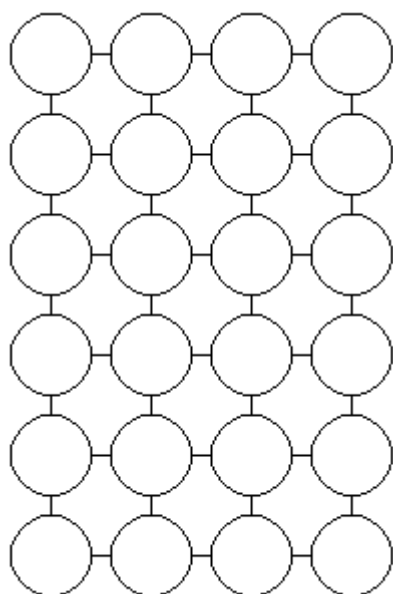
Slika 1.6



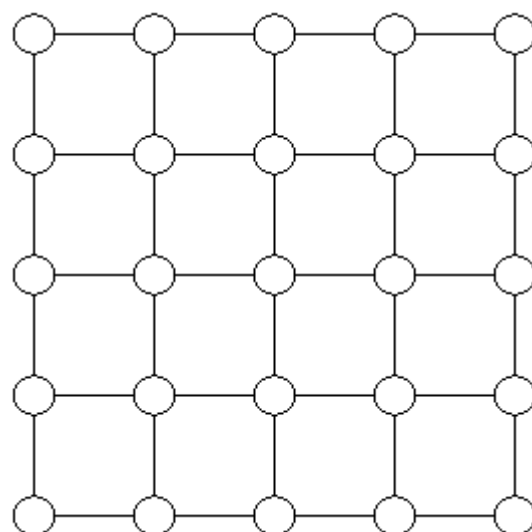
Slika 1.7



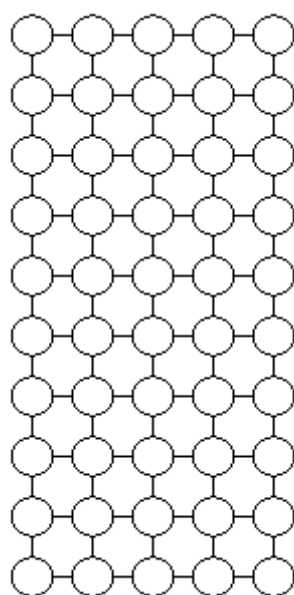
Slika 1.8



Slika 1.9

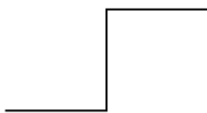


Slika 1.10



Slike 2: Signal

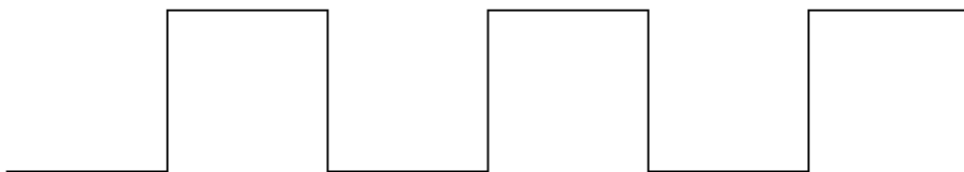
Slika 2.1



Slika 2.2



Slika 2.3



Slika 2.4



Slika 2.5



Slika 2.6



Slika 2.7



Slika 2.8



Slika 2.9

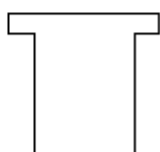
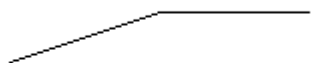
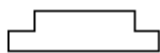


Slika 2.10

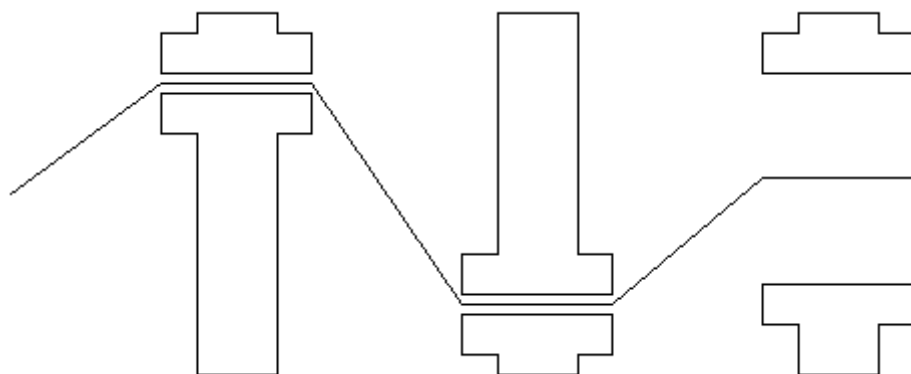


Slike 4: Flappy

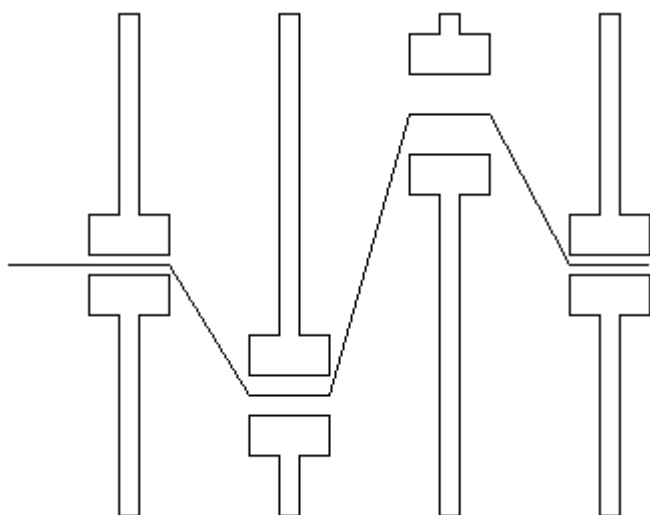
Slika 4.1



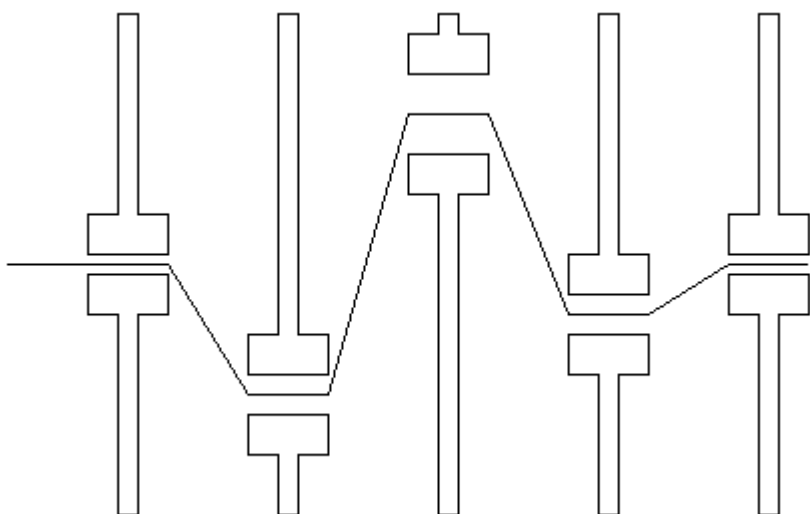
Slika 4.2



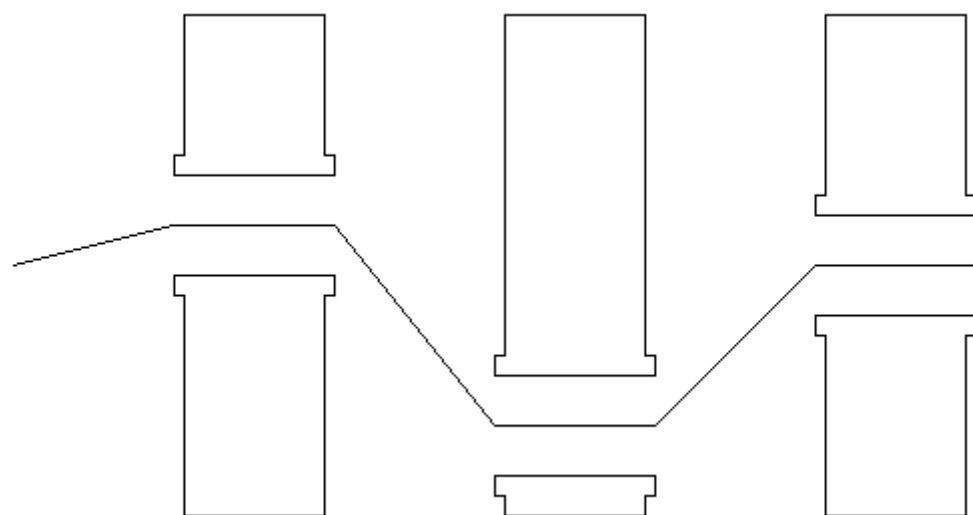
Slika 4.3



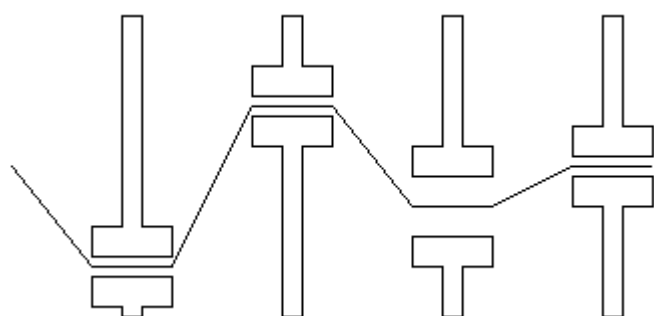
Slika 4.4



Slika 4.5



Slika 4.6



Slika 4.10

