

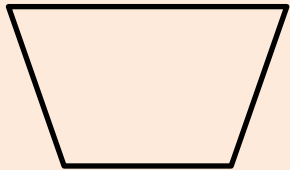
**Programiranje**  
**Dijagram tijeka (toka)**  
**Algoritamski postupak: Slijed**

Armando Slaviček

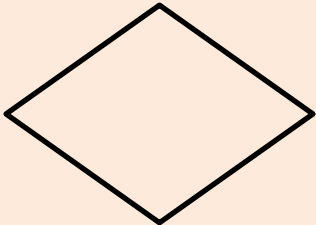
# Geometrijski oblici u dijagramu tijeka (toka)



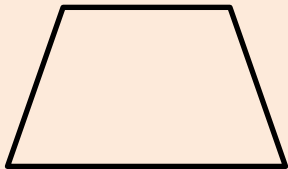
Početak/Kraj



Trapez (dulja osnovica gore) se koristi za ulaz podataka



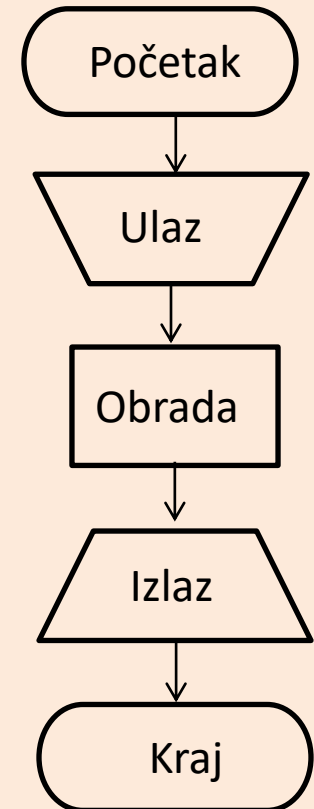
Simbol za odluku



Trapez (dulja osnovica dolje) se koristi za izlaz podataka

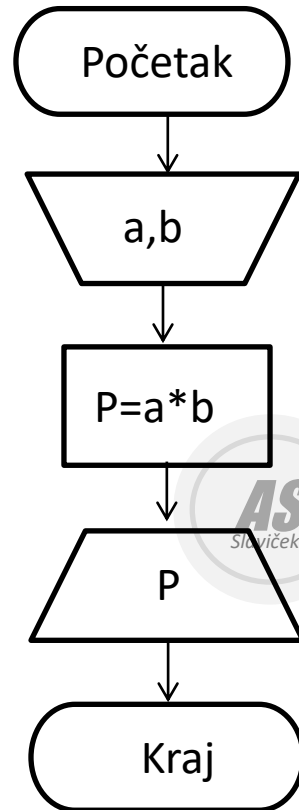


Pravokutnik služi za upis naredbi

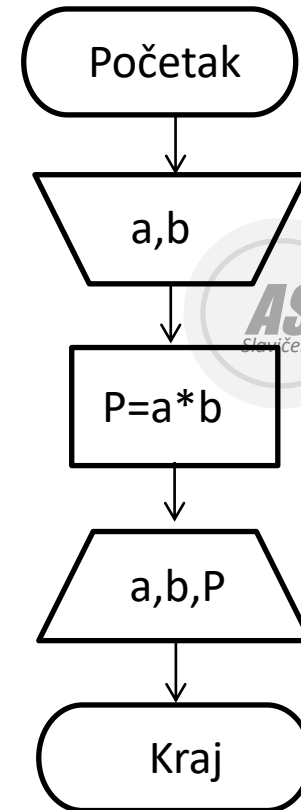


# Napiši program u Pythonu

## Zadatak 1.

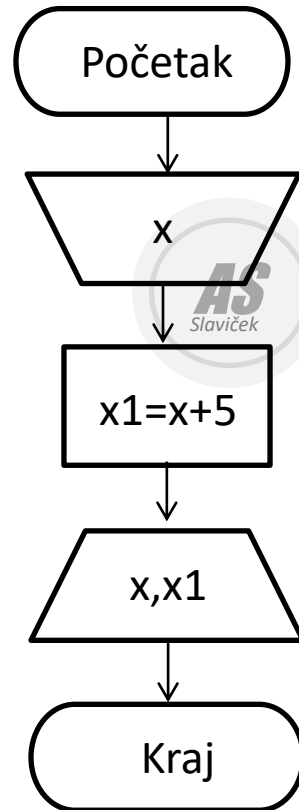


## Zadatak 2.

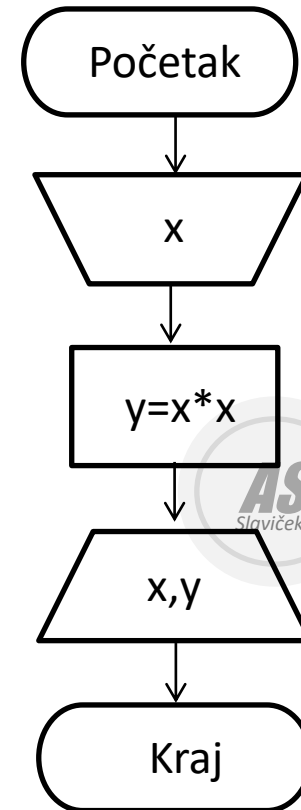


# Napiši program u Pythonu

## Zadatak 3.

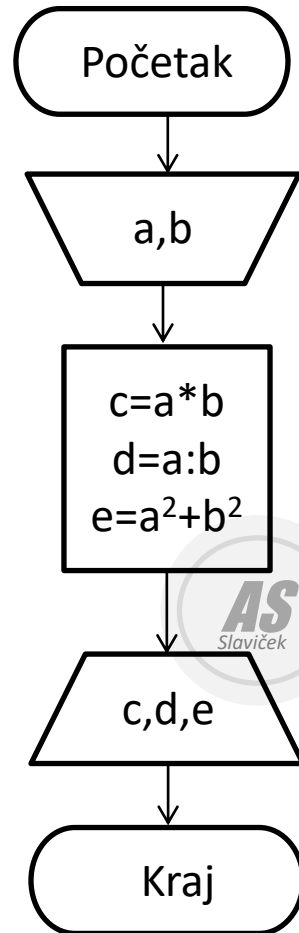


## Zadatak 4.

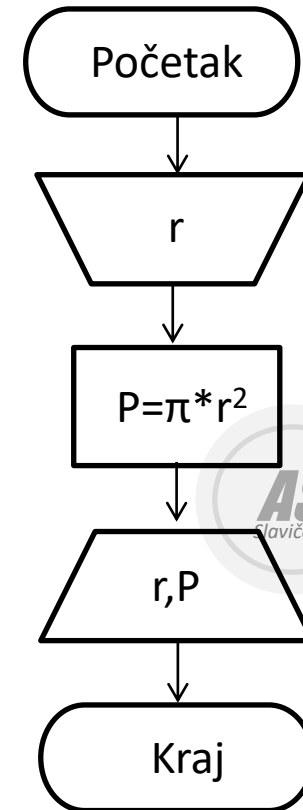


# Napiši program u Pythonu

## Zadatak 5.



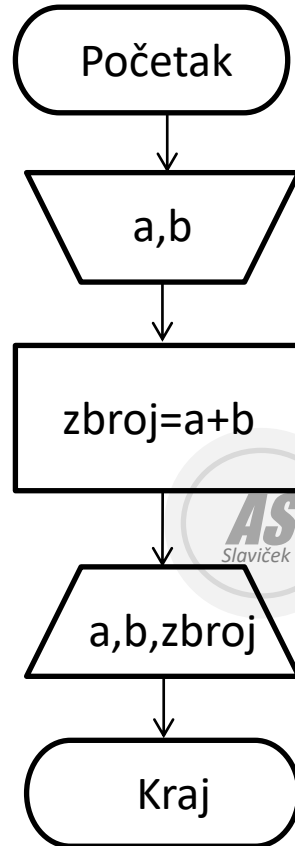
## Zadatak 6.



# Napiši program u Pythonu

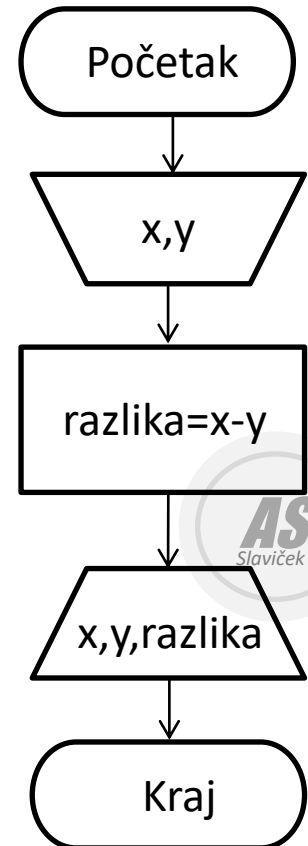
## Zadatak 7.

Zbroj brojeva a i b.



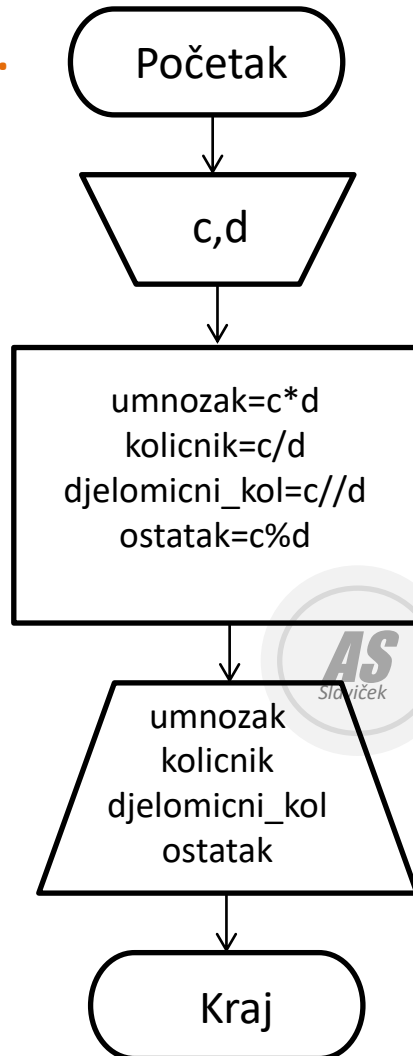
## Zadatak 8.

Razlika brojeva x i y.



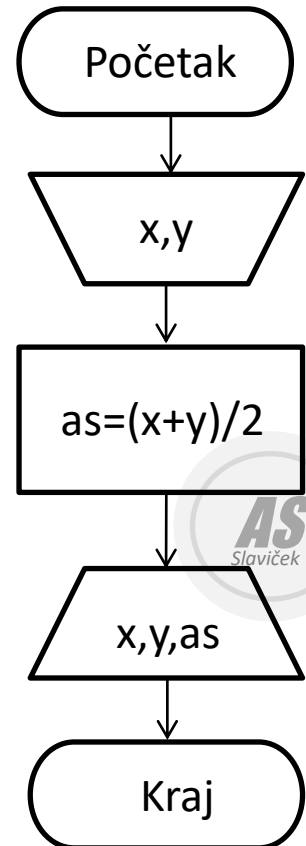
# Napiši program u Pythonu

## Zadatak 9.



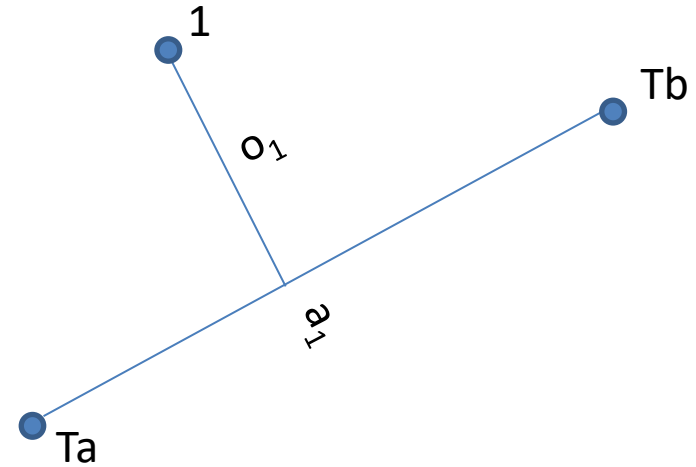
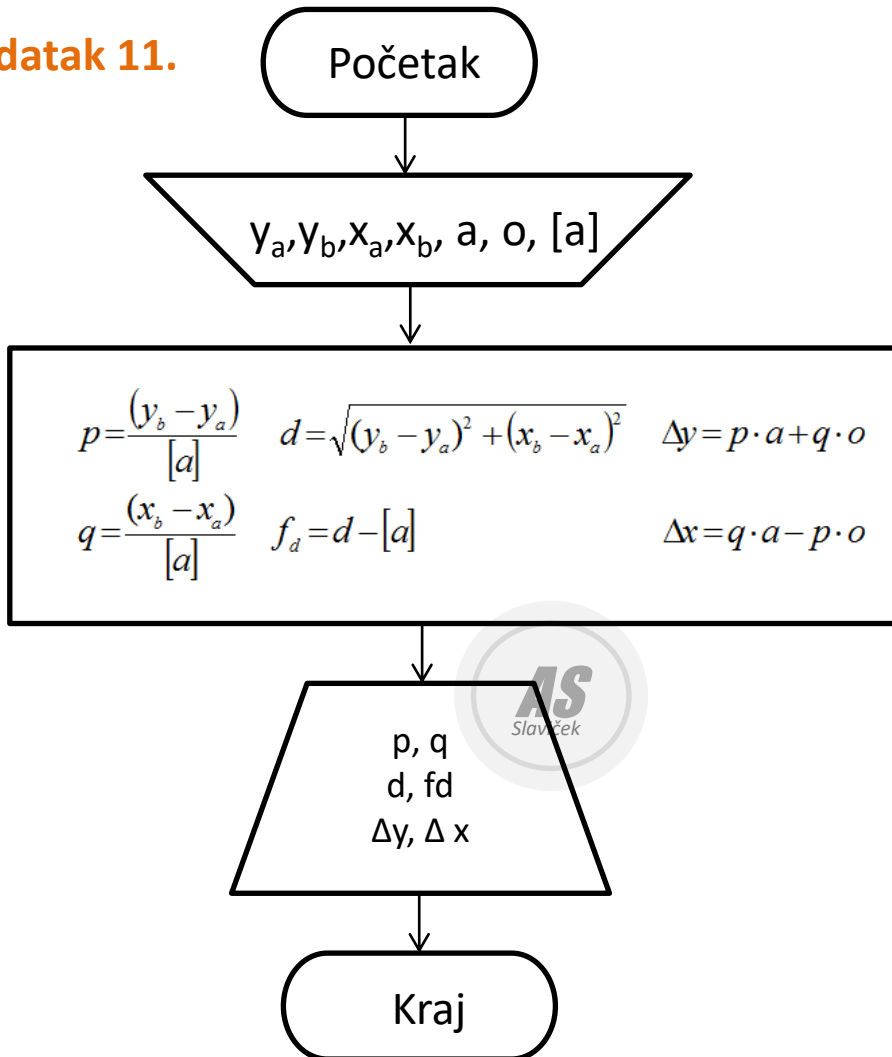
## Zadatak 10.

### Aritmetička sredina



# Napiši program u Pythonu

## Zadatak 11.



## Riješeni primjer:

Unesi koordinatu ya= 145123.58  
 Unesi koordinatu xa= 134512.52  
 Unesi koordinatu yb= 145325.45  
 Unesi koordinatu xb= 134600.58  
 Unesi apscisu a = 34.19  
 Unesi ordinatu o = -25.23  
 Unesi [a]= 220.32

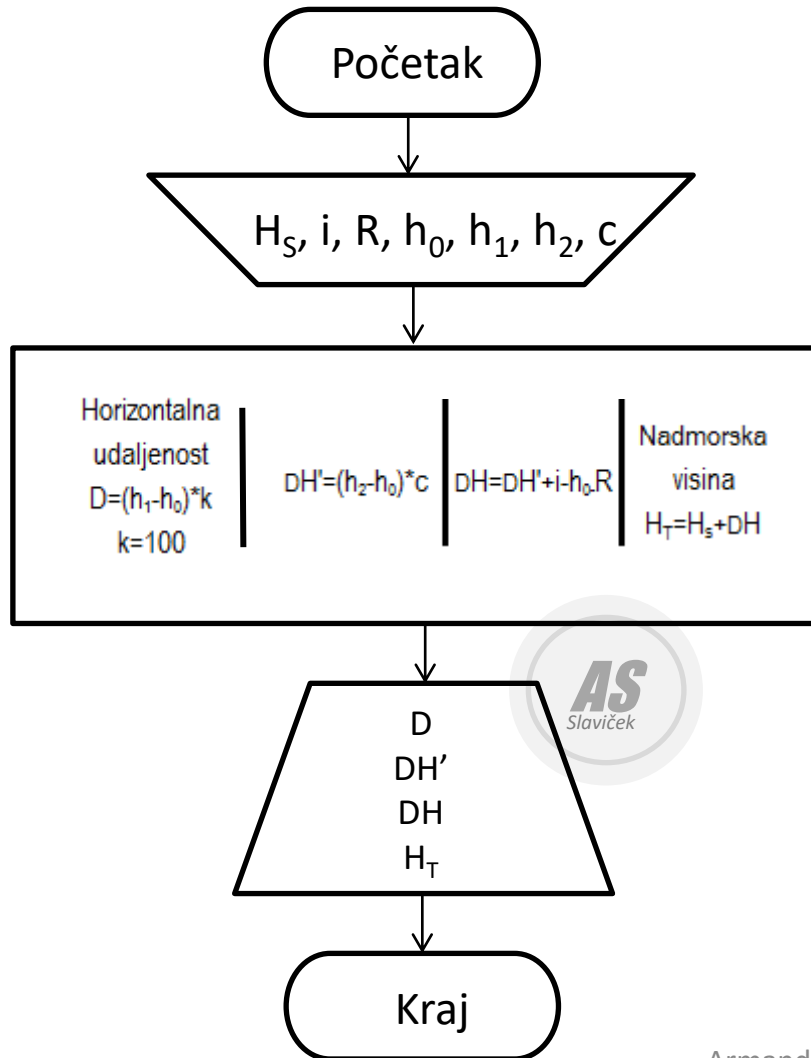
-----  
 p= 0.9162581699347515    q= 0.3996913580246808  
 d= 220.2409146821032    fd= -0.07908531789678364  
 dy= 21.242653867106455    dx= 36.78264115831762



# Napiši program u Pythonu

Stajalište i= R= Datum	Vizura	Horizontalni kut o . . .	Odsječak na letvi za dužine $h_0$ $h_1$	Konstanta za visine - c	Odsječak na letvi za dužine $h_0$ $h_2$	Horizontalna udaljenost $D=(h_1-h_0)*k$ $k=100$	$i-h_0-R$ ili $-h_0$ [ $h_0$ ]	$DH'=(h_2-h_0)*c$ [DH']	$DH=DH'+i-h_0-R$ [DH]	Nadmorska visina $H_T=H_S+DH$ [H <sub>T</sub> ]	Napomena $H_S$
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## Zadatak 12. - Tahimetrijski zapisnik (Dahlta)



$H_S$  – visina stajališta  
 $i$  – visina instrumenta  
 $R$  – reper  
 $h_0, h_1, h_2$  - odsječak na letvi  
 $c$  – konstanta za visine



### Rišeni primjer:

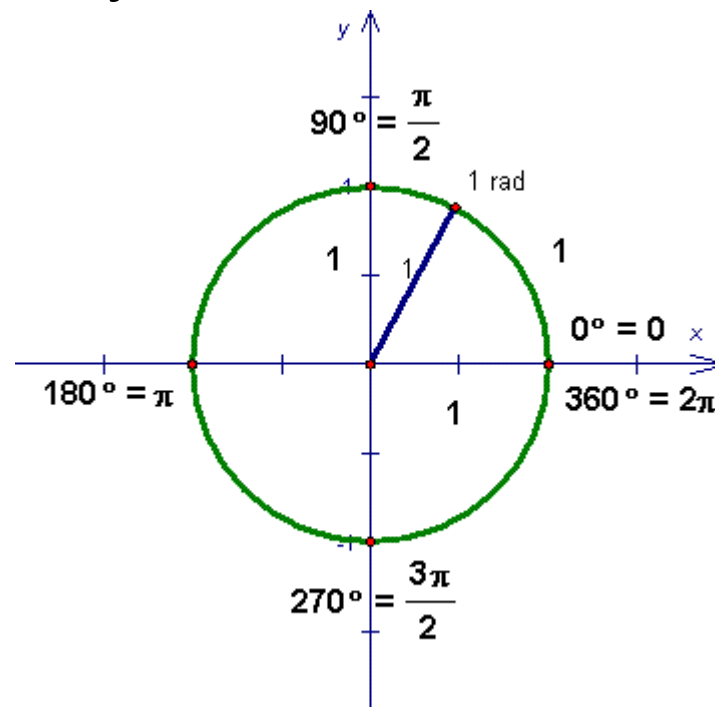
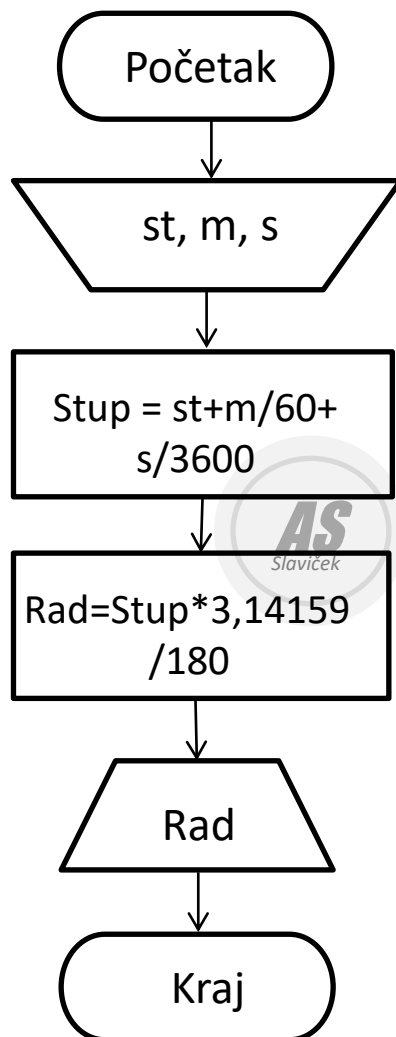
Unesi visinu stajališta  $H_S = 75.61$   
 Unesi visinu instrumenta  $i = 1.72$   
 Unesi očitavanje na letvi -  $h_0 = 1$   
 Unesi očitavanje na letvi -  $h_1 = 1.871$   
 Unesi očitavanje na letvi -  $h_2 = 1.569$   
 Unesi konstantu za visine -  $c = 10$   
 Unesi visinu repera na letvi -  $R = 0$

-----  
 Horizontalna udaljenost iznosi = 87.1  
 $DH'=(h_2-h_0)*c = 5.69$   
 $DH=DH'+i-h_0-R = 6.41$   
 Nadmorska visina točke iznosi = 82.02

Primjer zaokruživanja na n decimala:  
`print("DH'=(h2-h0)*c = ", round(dh,2))`

### Zadatak 13. – Stupnjevi i radijani

Napiši program koji će učitati kut u stupnjevima, minutama i sekundama, a zatim ga pretvoriti u radijane.



Radijani : stupnjevi = 3,14159 : 180

*Riješeni primjer:*

*Unesi stupnjeve= 42*

*Unesi minute= 35*

*Unesi sekunde = 26*

*Kut ima = 0.7433448 radijana*

## Zadatak 14. – Dvostruka kolimacijska pogreška

Napiši program koji će računati dvostruku kolimacijsku pogrešku (2c) – pogrešku vizurne osi

Datum i sat	Stajalište Girus	Vizurna točka	I Položaj durbina			II Položaj durbina			Dvostruka kolimacijska pogreška 2c = II - I
			o	'	"	o	'	"	
1	2	3	4			5			8
14.09.2023.	PT 21	PT 31	00	00	16	180	00	30	
7,15 sati	1. girus	PT 32	67	50	36	247	50	24	
		PT 33	181	10	18	01	10	26	
		PT 34	212	04	00	32	04	12	
		PT 35	302	53	48	122	53	36	
		PT 36	0	00	22	180	00	30	



Program

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početak

unesi minute 1. položaj inst.

unesi sekunde 1. položaj inst.

unesi minute 2. položaj inst.

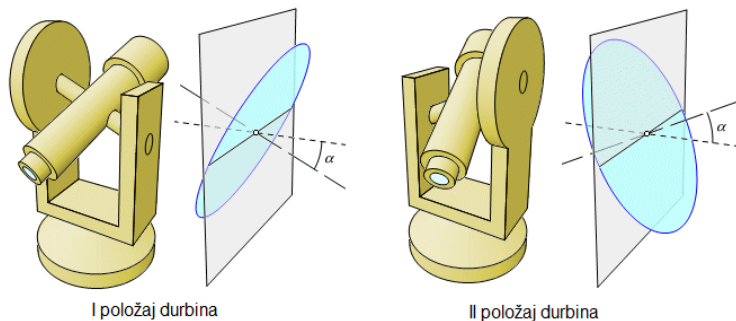
unesi sekunde 2. položaj inst.

ukupno\_sek1=mnt1\*60+sek1

ukupno\_sek2=mnt2\*60+sek2

dvostruka\_c=ukupno\_sek2-ukupno\_sek1

ispiši dvostruka\_c



I položaj durbina

II položaj durbina

Armando Slaviček

Vertikalni  
krug

