

Problem 5

Supyire

by Aleksejs Peguševs

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Supyire

- is a **Senufo** language spoken by approx. 350 000 people in **Mali** and **Cote d'Ivoire**



[source:

en.wikipedia.org/wiki/

File: Supyire_language.png]

Supyire

- is a **Senufo** language spoken by approx. 350 000 people in **Mali** and **Cote d'Ivoire**
- means 'the people' or 'the language spoken by the people'



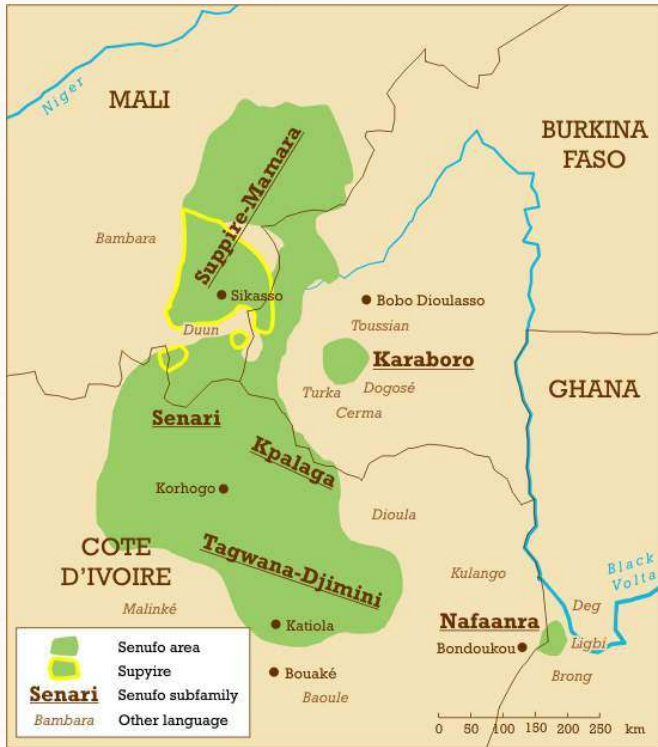
[source:

[en.wikipedia.org/wiki/](https://en.wikipedia.org/wiki/File:Supyire_language.png)

File: Supyire_language.png]

Supyiré

- is a **Senufo** language spoken by approx. 350 000 people in **Mali** and **Cote d'Ivoire**
- means 'the people' or 'the language spoken by the people'
- uses 4 phonemic **tones** (H, L, Ms, Mw)

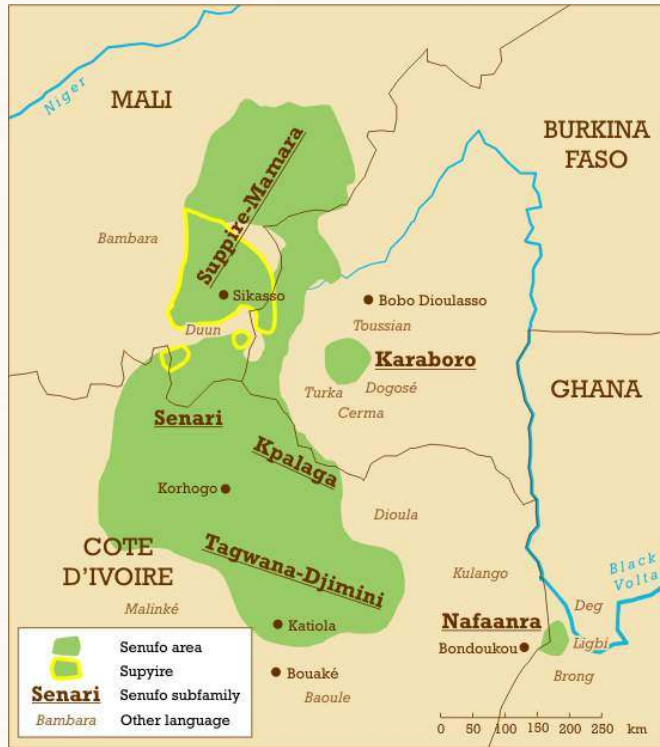


[source:

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File: Supyire_language.png]

Supyiré



- is a **Senufo** language spoken by approx. 350 000 people in **Mali** and **Cote d'Ivoire**
- means 'the people' or 'the language spoken by the people'
- uses 4 phonemic **tones** (H, L, Ms, Mw)

(much) more information can be found
in **A Grammar of Supyire**
by **Robert Carlson** (1994)

[source:

[en.wikipedia.org/wiki/
File:Supyire_language.png](https://en.wikipedia.org/wiki/File:Supyire_language.png)]

baashuunni	7
berjaaga na ninjin	21
ɲkɔuu taanre na beeshuunni na kaykuro	285
kampwoo na ɲkɔuu shuunni na beetaanre na baani	626
kampɔhii sicyeere na berjaaga na ke na baaricyeere	1639

(a) kampɔhii shuunni na ke
 ɲkuu na baataanre

baashuunni	7
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(a) kampɔhii shuunni na ke
 ɲkuu na baataanre

na

baashuunni	7
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(a) kampɔhii shuunni na ke
 ɲkuu na baataanre

na baa-
 bee-

baashuunni

7

berjaaga na ninjin

21

ɲkɔuu taanre na beeshuunni na kaykuro

285

kampwoo na ɲkɔuu shuunni na beetaanre na baani

626

kampwɔhii sicyeere na berjaaga na ke na baaricyeere

1639

(a) kampwɔhii shuunni na ke
ɲkuu na baataanre

na baa- shuunni

bee- taanre

ni

ricyeere

are
followed
by



baashuunni

7

berjaaga na ninjin

21

nkwoo taanre na beeshuunni na kaykuro

285

kampwoo na nkwoo shuunni na beetaanre na baani

626

kampwshii sicyeere na berjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke
nkwoo na baataanre

na baa- shuunni nkwoo

bee- taanre kampwshii

ni

ricyeere

sicyeere

are
followed
by

are
followed
by

baashuunni

7

benjaaga na ninjin

21

nkuru taanre na beeshuunni na kankuro

285

kampwoo na nkuru shuunni na beetaanre na baani

626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkuru na baataanre

na	baa-	shuunni	nkuru	nkuru
	bee-	taanre	kampwshii	kampwoo
		ni		ninjin
		ricyeere		benjaaga
		sicyeere		ke
				kankuro

are followed by

are followed by

baashuunni

7

benjaaga na ninjin

21

nkuru taanre na beeshuunni na kankuro

285

kampwoo na nkuru shuunni na beetaanre na baani

626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkuru na baataanre

na⁺? baa-

shuunni

nkuru

nkuru

bee-

taanre

kampwshii

kampwoo

ni

ninjin

ricyeere

benjaaga

sicyeere

ke

kankuro

are followed by

are followed by

baashuunni

7

benjaaga na ninjin

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nkwoo taanre na beeshuunni na kankuro

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kampwoo na nkwoo shuunni na beetaanre na baani

626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkwoo na baataanre

na+?

baa-

shuunni

nkwoo

nkwoo

summands
in decreasing
order?

bee-

taanre

kampwshii

kampwoo

ni

ninjin

ricyeere

benjaaga

sicyeere

ke

are
followed
by

are
followed
by

kankuro

baashuunni

7

benjaaga na ninjin

21

nkwoo taanre na beeshuunni na kankuro

285

kampwoo na nkwoo shuunni na beetaanre na baani

626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkoo na baataanre

na+?
summands
in decreasing
order?

baa-

shuunni

nkwoo

nkoo

bee-

taanre

kampwshii

kampwoo

ni

ninjin

are
followed
by

ricyeere
related?
sicyeere

are
followed
by

benjaaga

ke

kankuro

baashuunni

7

benjaaga na ninjin

21

nkɔwɔ taanre na beeshuunni na kankuro

285

kampɔwɔ na nkɔwɔ shuunni na beetaanre na baani

626

kampɔshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampɔshii shuunni na ke

nkɔwɔ na baataanre

na+?
summands
in decreasing
order?

baa-

shuunni

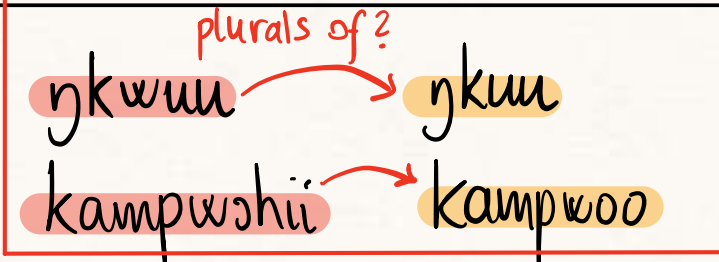
bee-

taanre

ni

ricyeere

sicyeere



are
followed
by

are
followed
by

ninjin

benjaaga

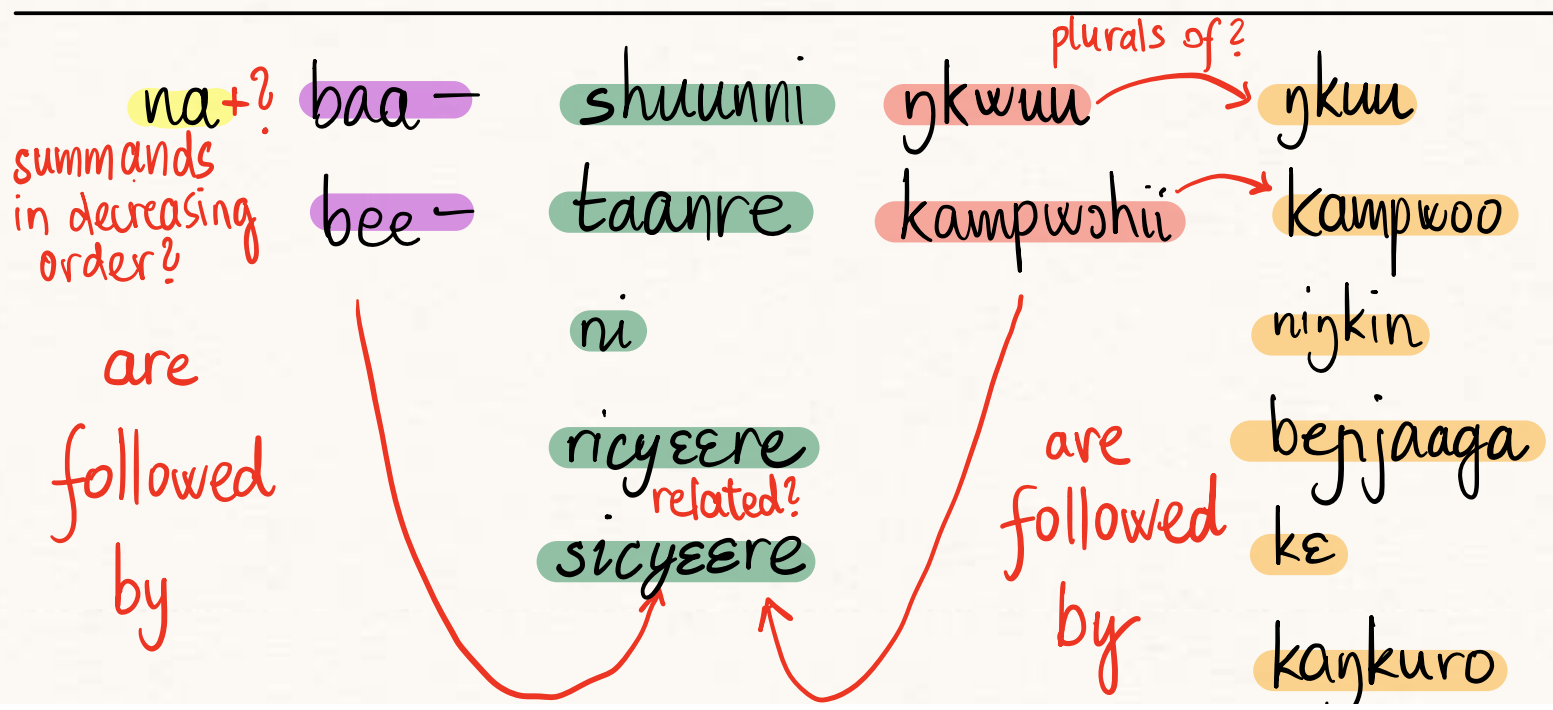
ke

kankuro

baashuunni 7×1? 6+1? 5+2? 4+3? 10-3? 7

benjaaga na ninjin 21
 nkuru taanre na beeshuunni na kankuro 285
 kampwoo na nkuru shuunni na beetaanre na baani 626
 kampwshii sicyeere na benjaaga na ke na baaricyeere 1639

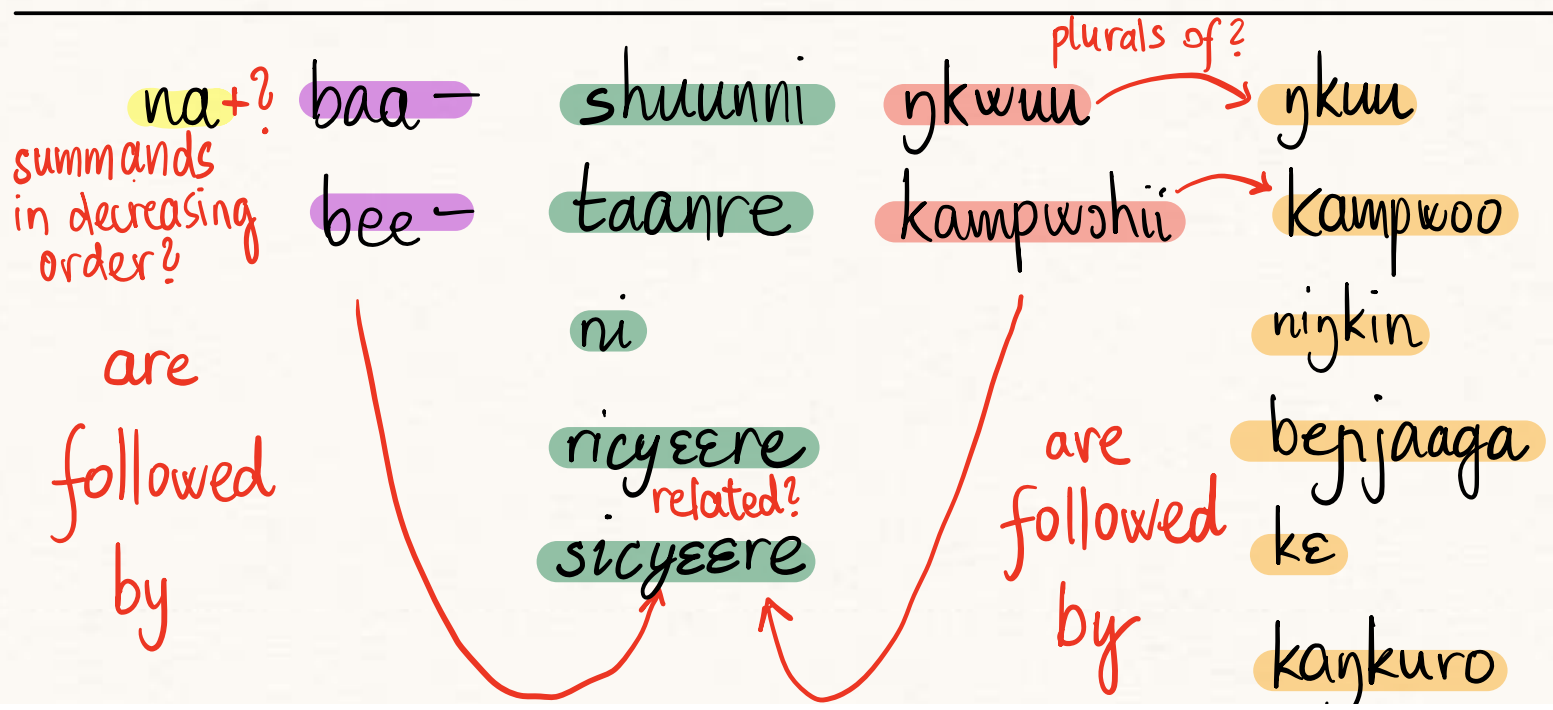
(a) kampwshii shuunni na ke
 nkuru na baataanre



baashuunni ~~7x1?~~ 6+1? 5+2? ~~4+3?~~ 10-3? 7

benjaaga na ninjin 21
 nkuru taanre na beeshuunni na kankuro 285
 kampwoo na nkuru shuunni na beetaanre na baani 626
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(a) kampwshii shuunni na ke
 nkuru na baataanre



baashuunni

6+1? 5+2?

10-3?

7

benjaaga na ninjin

21

nkuru taanre na beeshuunni na kankuro

285

kampwoo na nkuru shuunni na beetaanre na baani

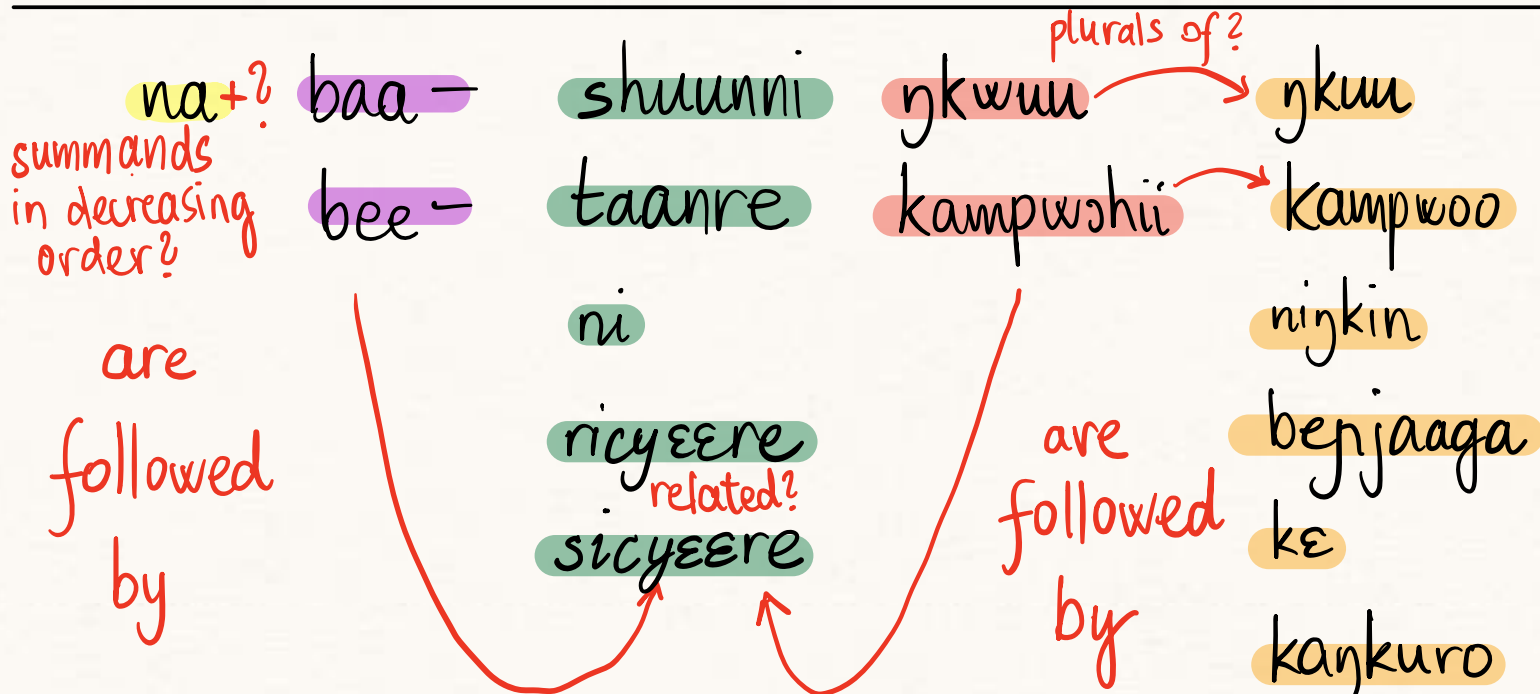
626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkuru na baataanre



baashuunni

5+2?

7

benjaaga na ninjin

21

nkuru taanre na beeshuunni na kankuro

285

kampwoo na nkuru shuunni na beetaanre na baani

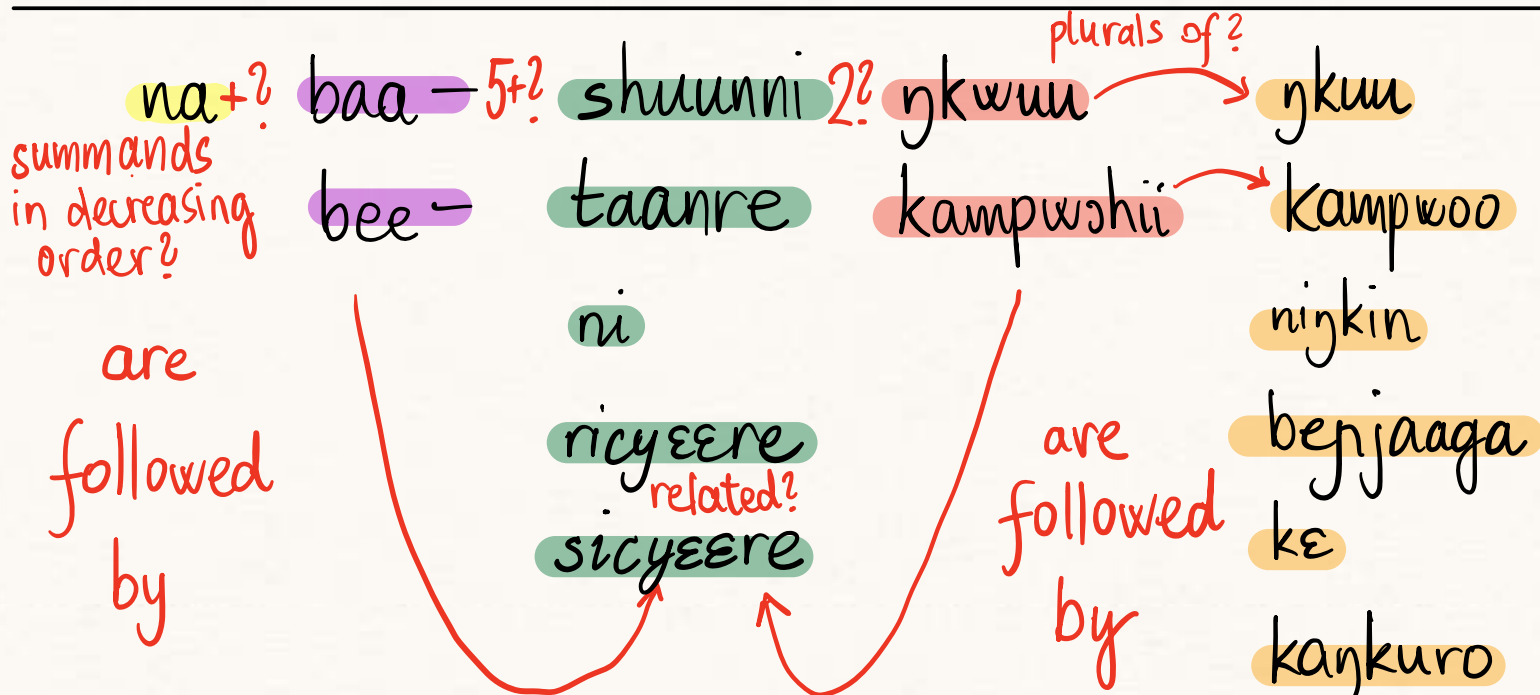
626

kampwshii sicyeere na benjaaga na ke na baaricyeere

1639

(a) kampwshii shuunni na ke

nkuru na baataanre



benjaaga na ninjin

21

nkwuu taanre na beeshuunni na kankuro

285

kampwoo na nkwuu shuunni na beetaanre

620

kampwshii sicyeere na benjaaga na ke

1630

(a) kampwshii shuunni na ke

nkuu na baataanre

na+? baa- 5+? shuunni 2? nkwuu ^{plurals of?} nkuu
 summands in decreasing order? bee- taanre kampwshii ^{plurals of?} kampwoo
 ni 1? ninjin
 ricyeere 4? ^{related?} benjaaga
 sicyeere ke
 kankuro

benjaaga na ninjin

21

nkwuu taanre na beeshuunni na kankuro

285

kampwoo na nkwuu shuunni na beetaanre

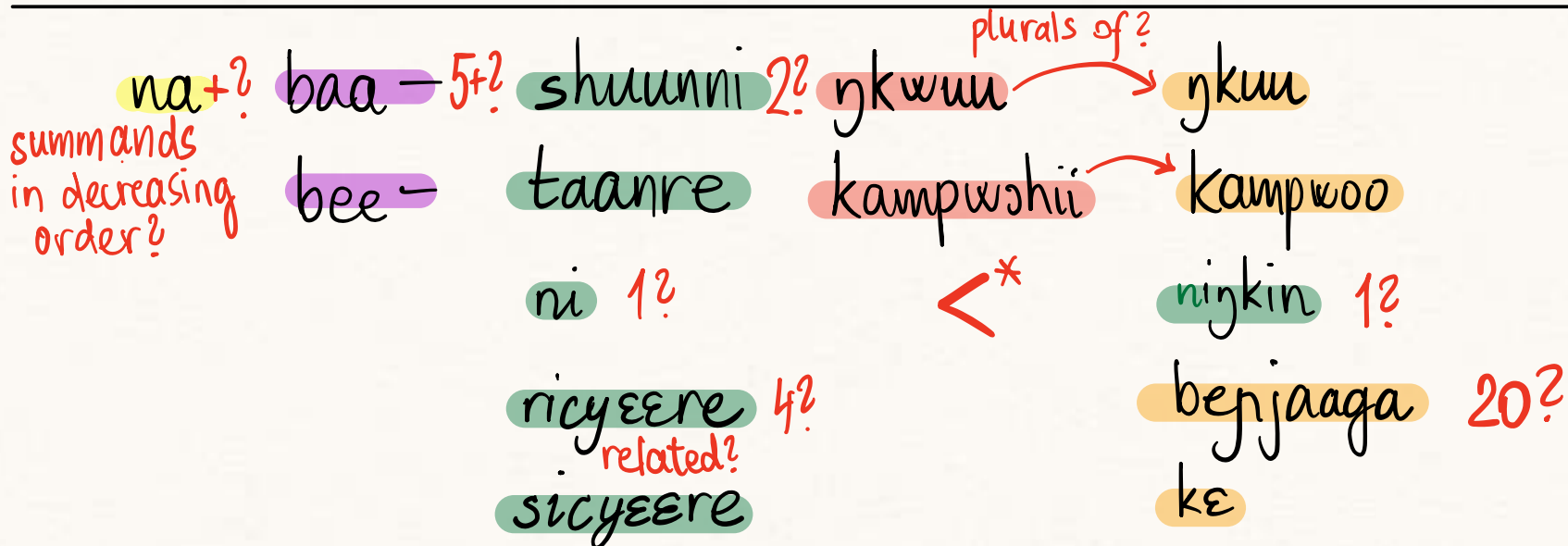
620

kampwshii sicyeere na benjaaga na ke

1630

(a) kampwshii shuunni na ke

nkuu na baataanre



*when preceded by baa-?

kankuro 5?

ɲkɔwɔ taanre na beeshuunni

280

kampɔwɔ na ɲkɔwɔ shuunni na beetaanre

620

kampɔshii sicyɛɛre na ke

1610

(a) kampɔshii shuunni na ke

ɲkuu na baataanre

na+? baa- 5+? shuunni 2? ɲkɔwɔ ^{plurals of?} ɲkuu
 bee- taanre kampɔshii ^{←*} kampɔwɔ
 ni 1? ɲiŋkin 1?
 ricyɛɛre 4? beɲjaaga 20?
 sicyɛɛre ke

*when preceded by baa-?

kankuro 5?

ɲkɔwɔ taanre na beeshuunni

280

kampɔwɔ na ɲkɔwɔ shuunni na beetaanre

620

kampɔshii sicyɛɛre na ke

1610

(a) kampɔshii shuunni na ke

ɲkuu na baataanre

na+? baa-5+? shuunni 2? ɲkɔwɔ ^{plurals of?} ɲkuu
 bee- taanre kampɔshii 400?! kampɔwɔ 400?!
 ni 1? <* niŋkin 1?
 ricyɛɛre 4? beŋjaaga 20?
 sicyɛɛre 4?! ke 10?!
 kankuro 5?

*when preceded by baa-?

ɲkwuu taanre na beeshuunni

280

ɲkwuu shuunni na beetaanre

220

(a) kampwshii shuunni na ke

ɲkuu na baataanre

na+? baa-5+? shuunni 2? ɲkwuu ^{plurals of?} ɲkuu
 bee- taanre kampwshii ^{400?!} kampwoo 400?!
 ni 1? <* niŋkin 1?
 ricyɛɛre 4?
 sicɛɛɛre ^{^* 2!} 4?!
 beŋjaaga 20?
 ke 10?!
 kankuro 5?

*when preceded by baa-?

ɲkwuu taanre na beeshuunni

280

ɲkwuu shuunni na beetaanre

220

(a) kampwshii shuunni na ke

ɲkuu na baataanre

na+? baa-5+? shuunni 2? ^{plurals of?} ɲkwuu → ɲkuu
 bee- taanre 3?! kampwshii 400?! kampwoo 400?!
 ni 1? <* niŋkin 1?
 ricyɛɛre 4?
 sicɛɛɛre 4?!
 beŋjaaga 20?
 ke 10?!
 kankuro 5?

*when preceded by baa-?

ɲkwuu taanre na beeshuunni

280

ɲkwuu shuunni na beetaanre

220

(a) kampwshii shuunni na ke

ɲkuu na baataanre

summands in decreasing order	na+	baa-5+	shuunni 2	ɲkwuu	plurals of	ɲkuu	chicken
		bee-20x	taanre 3	kampwshii	400	kampwoo	400
			ni 1	<*		nigkin	1
			riɲyɛɛre 4			beɲjaaga	20
			sicyɛɛre 4			ke	10
					kankuro	5	

*when preceded by baa-

ɲkwuu taanre na beeshuunni

280

ɲkwuu shuunni na beetaanre

220

(a) kampwshii shuunni na ke

ɲkuu na baataanre

na+ baa-5+ shuunni 2 ɲkwuu plurals of ɲkuu chicken?!?!?

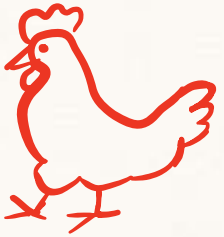
summands in decreasing order bee-20x taanre 3 kampwshii 400 kampwoo 400

ni 1 < * nijkin 1

ricyεere 4 bejjaaga 20

sicyεere 4 ke 10

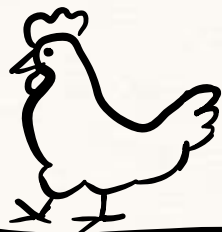
kankuro 5



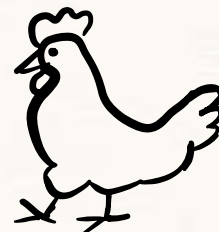
*when preceded by baa-

What is this?

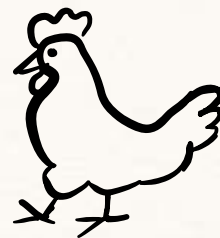
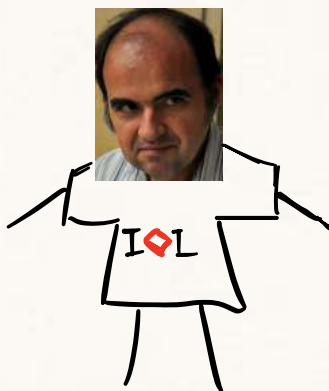
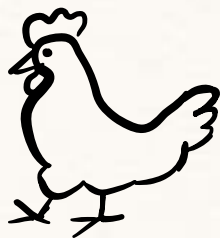
ĩkũũ



Thank you! And how much is it?



ĩkũũ



ɲkwuu taanre na beeshuunni

280

ɲkwuu shuunni na beetaanre

220

(a) kampwshii shuunni na ke

ɲkuu na baataanre

na+ baa-5+ shuunni 2 ɲkwuu ^{plurals of} 80 → ɲkuu chicken, 80
 bee-20x taanre 3 kampwshii 400 → kampwoo 400
 ni 1 < * nigkin 1
 ricyeere 4 ^* bejjaaga 20 kaN- hand kuro fold/bend
 sicyeere 4 ke 10
 *when preceded by baa- kankuro 5, fist

ɲkɔwɔ taanre na beeshuunni

280

ɲkɔwɔ shuunni na beetaanre

220

(a) kampɔshii shuunni na ke

ɲkuu na baataanre

summands in decreasing order	na+	baa-5+	shuunni 2	ɲkɔwɔ	plurals of 80 →	ɲkuu	chicken, 80
		bee-20x	taanre 3	kampɔshii	400 →	kampɔ	400
			ni 1		<*	niŋkin 1	
			ɲicyɛɛre 4			beɲjaaga 20	
			sicyɛɛre 4			ke 10	

*when preceded by baa-

kankuro 5, fist

(b) 15
 109
 152
 403
 1534

(a) kampwshii shuunni na ke
 nkUU na baataare

na+ baa-5+ shuunni 2 nkUU ^{plurals of} 80 → nkUU chicken, 80
 bee-20x taanre 3 kampwshii 400 → kampwoo 400
 ni 1 < * niKin 1
 ricyeere 4 bejaaga 20
 sicyeere 4 ke 10
 kankuro 5, fist

summands in decreasing order

*when preceded by baa-

(b) 15 ke na kankuro
 109 nkUU na beijaaga na baaricyeere
 152 nkUU na beetaanre na ke na shuunni
 403 kampwoo na taanre
 1534 kampwshii taanre na nkUU sicyeere na ke na sicyeere

(a) kampwshii shuunni na ke 810
 nkUU na baataanre 88

na+ summands in decreasing order

baa-5+	shuunni 2	nkUU ^{plurals of} 80 → nkUU	chicken, 80
bee-20x	taanre 3	kampwshii 400 → kampwoo	400
ni 1		<*	nigkin 1
	ricyeere 4		beijaaga 20
	sicyeere 4		ke 10

*when preceded by baa- kankuro 5, fist

Statistics

Statistics

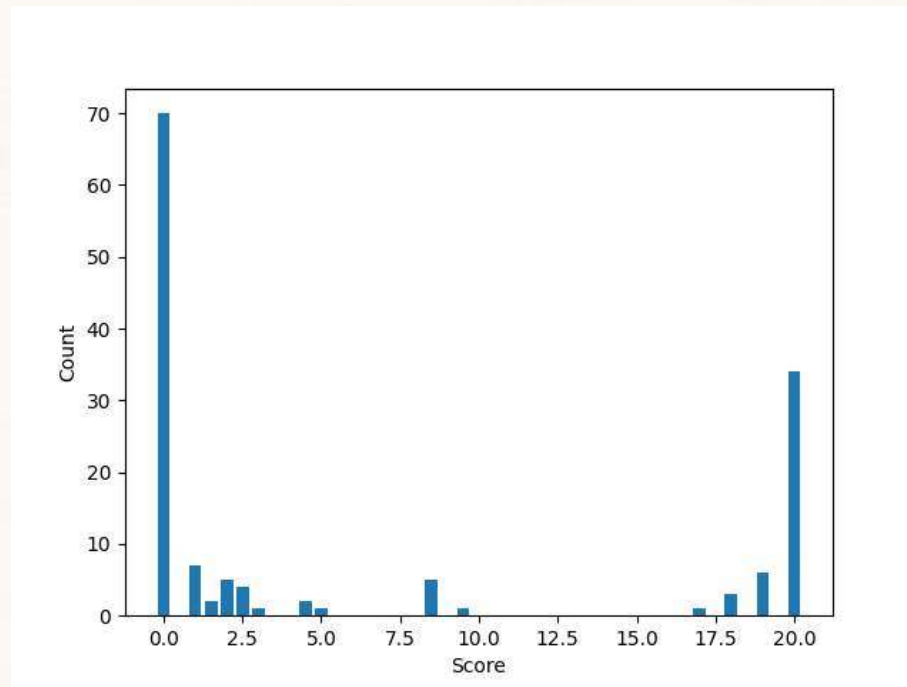
- the **hardest** problem (as voted by you)

Statistics

- the **hardest** problem (as voted by you)
(and also according to the average score of **4.70**)

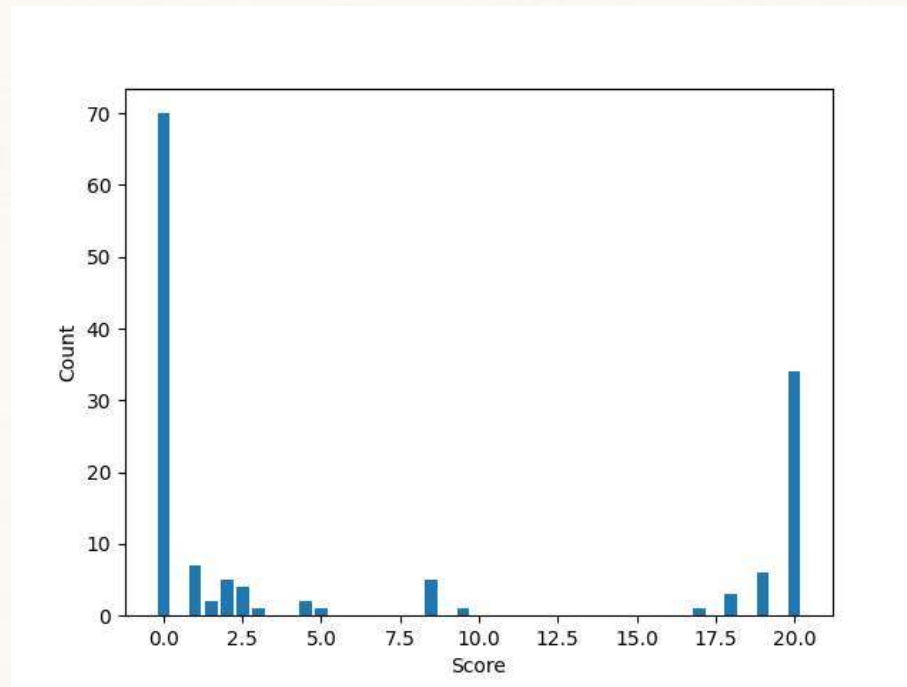
Statistics

- the **hardest** problem (as voted by you)
(and also according to the average score of **4.70**)
- out of 142 submitted solutions...



Statistics

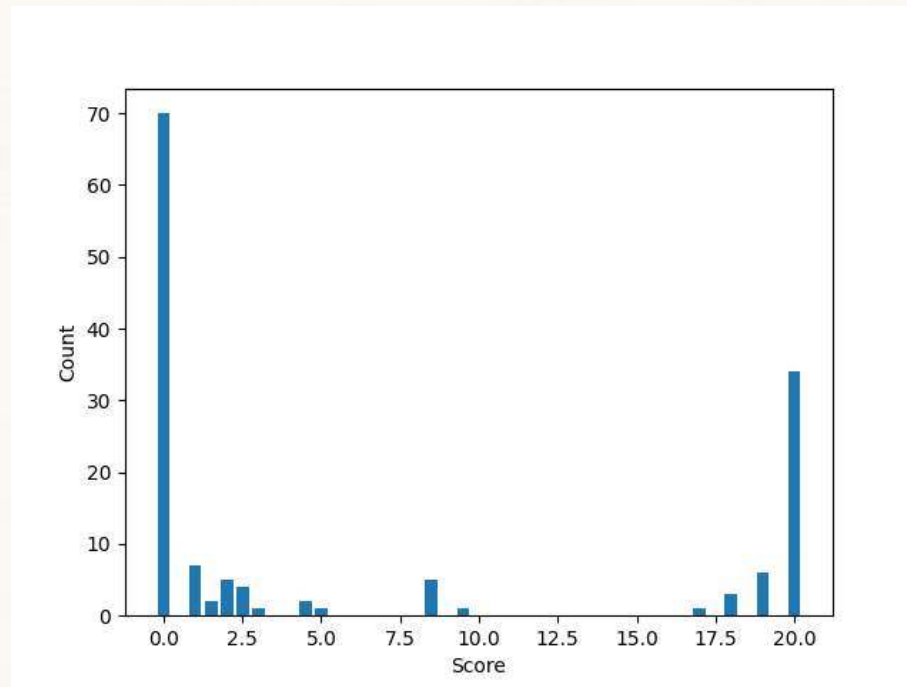
- the **hardest** problem (as voted by you)
(and also according to the average score of **4.70**)
- out of 142 submitted solutions...



... 34 received 20 points ...

Statistics

- the **hardest** problem (as voted by you)
(and also according to the average score of **4.70**)
- out of 142 submitted solutions...



... 34 received 20 points ...

... out of which we selected 4 best solutions

Best solution award for Problem 5



Best solution award for Problem 5



Daria Kryvosheieva
UKRAINE

Best solution award for Problem 5



Best solution award for Problem 5



Konstantin Georgiev

BULGARIA 1

Best solution award for Problem 5

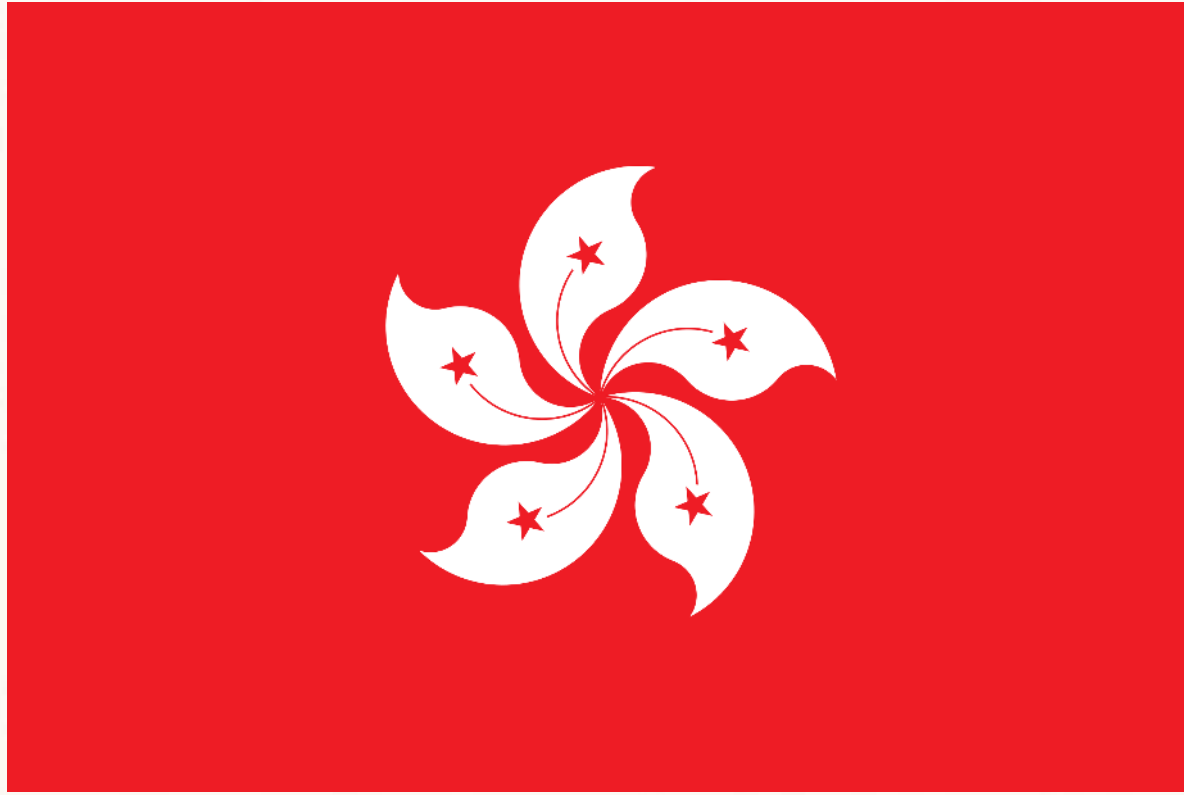


Best solution award for Problem 5

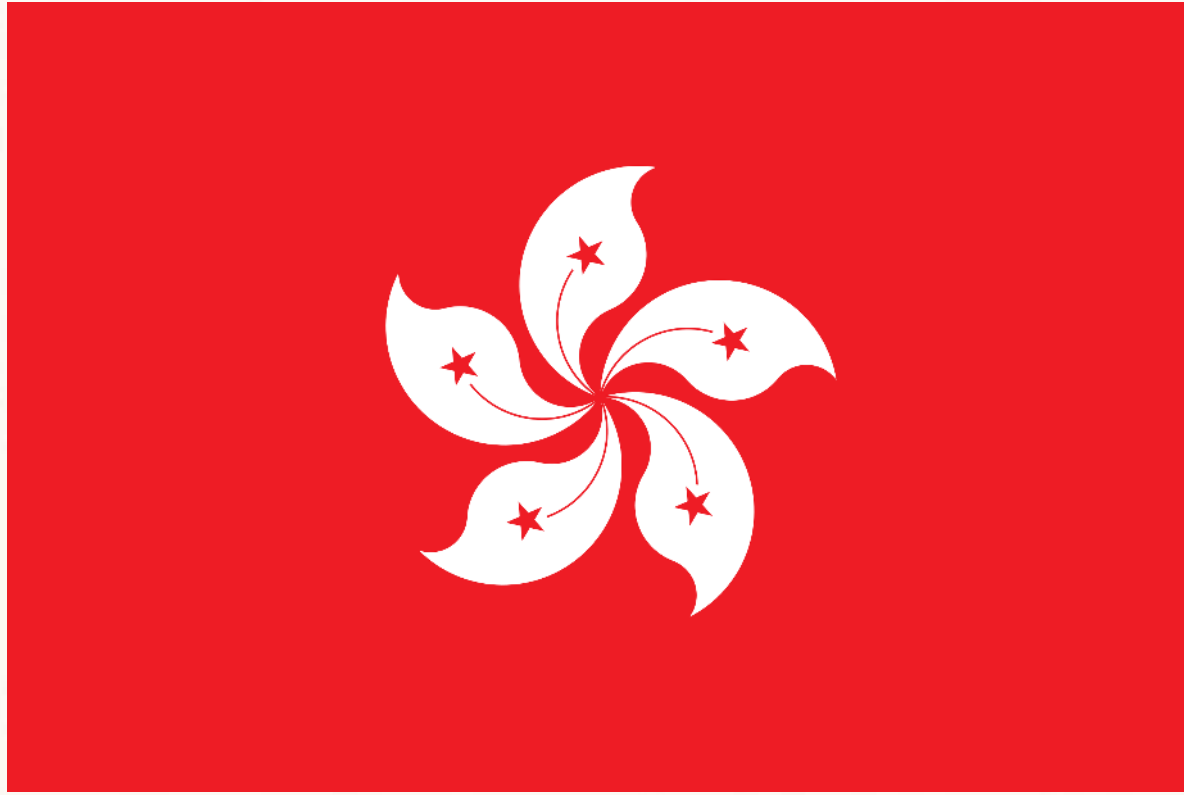


He Jianxing
TEAM QIAN

Best solution award for Problem 5



Best solution award for Problem 5



Tam Lok Hang
HONG KONG