

American Computer Science League

2020 Finals ● Program 4: Family Tree ● Senior Division

TEST INPUT (shown in 3 columns):

10	10	20
Pat Rich	Robin Dale	Zion Pat
Rich Jo	Pat Robin	Zion Rich
Pat Robin	Sam Rich	Rich Hayden
Sam Rich	Pat Quinn	Pat Max
Pat Quinn	Pat Rich	Logan Pat
Robin Dale	Robin Bobby	Zion Wyatt
Robin Bobby	Noel Bobby	Wyatt Quinn
Noel Bobby	Jo Lynn	Quinn Robin
Jo Lynn	Quinn Max	Terry Max
Quinn Max	Rich Jo	Hayden Alex
2	3	Alex Noel
Sam Lynn	Quinn Lynn	Faith Robin
Bobby Sam	Lynn Sam	Quinn Kaden
	Dale Jo	Max Jesse
		Robin Brook
		Sam Noel
		Max Dale
		Sam Emory
		Quinn Val
		Noel Gabriel
		5
		Val Robin
		Rich Emory
		Jesse Wyatt
		Dale Robin
		Pat Kaden

TEST OUTPUT:

- | | |
|----------------------|---------------------|
| 1. great-grandchild | 6. sibling |
| 2. grandparent | 7. great-grandchild |
| 3. grandnibling | 8. grandpibling |
| 4. great-grandparent | 9. second cousin |
| 5. cousin | 10. grandnibling |

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SAMPLE INPUT for HackerRank:

4
Moe Lisa
Moe Dick
Ella Lisa
Ella Mike
Ella Moe
14
Sam Len
Sam Moe
Faith Moe
Sam Ken
Faith Stan
Moe Lisa
Moe Dick
Moe Mike
Ella Lisa
Stan Mia
Stan Joe
Lisa Max
Rich Max
Mia Carl
Dick Max
14
Ella Lisa
Mia Carl
Ella Dick
Lisa Max
Faith Ken
Rich Max
Sam Ken
Moe Lisa
Sam Stan
Stan Mia
Sam Moe
Faith Len
Ella Mike
Stan Joe
Rich Ella

SAMPLE OUTPUT:

1. spouse

2. nibling

3. parent

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TEST INPUT for HackerRank:

10	Quinn Kaden	Zion Wyatt
Pat Rich	Max Jesse	Quinn Robin
Rich Jo	Robin Brook	Terry Max
Pat Robin	Sam Noel	Sam Emory
Sam Rich	Max Dale	Zion Rich
Pat Quinn	Sam Emory	Hayden Alex
Robin Dale	Quinn Val	Noel Gabriel
Robin Bobby	Noel Gabriel	Sam Noel
Noel Bobby	Val Robin	Faith Robin
Jo Lynn	20	Quinn Kaden
Quinn Max	Robin Dale	Max Jesse
Sam Lynn	Pat Robin	Zion Pat
10	Sam Rich	Wyatt Quinn
Robin Dale	Kris Andy	Robin Brook
Pat Robin	Stacy Lynn	Sam Noel
Sam Rich	Pat Quinn	Val Logan
Pat Quinn	Max Lee	15
Pat Rich	Val Jordan	Pat Rich
Robin Bobby	Pat Rich	Rich Jo
Noel Bobby	Robin Bobby	Pat Robin
Jo Lynn	Quinn Max	Sam Rich
Quinn Max	Noel Bobby	Pat Quinn
Rich Jo	Jo Lynn	Robin Dale
Max Noel	Rich Jo	Robin Bobby
20	Izzy Max	Noel Bobby
Zion Pat	Sam Taylor	Jo Lynn
Zion Rich	Val Jo	Quinn Max
Rich Hayden	Dale Andy	Casey Jo
Pat Max	Izzy Casey	Bobby Kris
Logan Pat	Lynn Jamie	Alex Max
Zion Wyatt	Noel Andy	Jo Jesse
Wyatt Quinn	20	Val Kris
Quinn Robin	Quinn Val	Lynn Noel
Terry Max	Rich Hayden	15
Hayden Alex	Pat Max	Pat Rich
Alex Noel	Max Dale	Robin Dale
Faith Robin	Logan Pat	Rich Jo

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Noel Bobby
Jo Lynn
Robin Bobby
Quinn Max
Pat Robin
Casey Jo
Sam Rich
Pat Kris
Bobby Kris
Alex Max
Pat Quinn
Jo Jesse
Kris Noel
20
Zion Pat
Zion Rich
Rich Hayden
Pat Max
Logan Pat
Zion Wyatt
Wyatt Quinn
Quinn Robin
Terry Max
Hayden Alex
Alex Noel
Faith Robin
Quinn Kaden
Max Jesse
Robin Brook
Sam Noel
Max Dale
Sam Emory
Quinn Val
Noel Gabriel
Wyatt Sam
20
Robin Dale
Pat Robin
Sam Rich

Kris Andy
Stacy Lynn
Pat Quinn
Max Lee
Val Jordan
Pat Rich
Robin Bobby
Quinn Max
Noel Bobby
Jo Lynn
Rich Jo
Izzy Max
Sam Taylor
Val Jo
Dale Andy
Izzy Casey
Lynn Jamie
Jordan Casey
20
Rich Hayden
Sam Emory
Pat Max
Quinn Robin
Logan Pat
Zion Wyatt
Wyatt Quinn
Terry Max
Hayden Alex
Alex Noel
Zion Pat
Faith Robin
Quinn Kaden
Max Jesse
Zion Rich
Robin Brook
Sam Noel
Max Dale
Quinn Val
Noel Gabriel

Alex Kaden

TEST OUTPUT:

1. great-grandchild
2. pibling
3. sibling
4. grandchild
5. great-grandparent
6. grandpibling
7. grandparent
8. grandnibling
9. cousin
10. second cousin