🤔 Dictionaries: Exercises

Q1) The dictionary below represents the cost of individual items in a supermarket. A separate dictionary is given in the table below, this dictionary represents the quantity of each item purchased. Use these two dictionaries to write a program that outputs the cost of each item.

```
groceries = {
      "Baby Spinach": 2.78,
      "Hot Chocolate": 3.70,
      "Crackers": 2.10,
      "Bacon": 9.00,
      "Carrots": 0.56,
      "Oranges": 3.08
}
```

quantity	**Output**

`quantity = {`
`"Baby Spinach": 1,`
`"Hot Chocolate": 3,`
`"Crackers": 2,`
`"Bacon": 1,`
`"Carrots": 4,`
`"Oranges": 2`
`}`
	`1 Baby Spinach @ $2.78 = $2.78`
	`3 Hot Chocolate @ $3.7 = $11.10`
	`2 Crackers @ $2.1 = $4.20`
	`1 Bacon @ $9.0 = $9.00`
	`4 Carrots @ $0.56 = $2.24`
	`2 Oranges @ $3.08 = $6.16`

`quantity = {`
`"Baby Spinach": 2,`
`"Hot Chocolate": 1,`
`"Crackers": 4,`
`"Bacon": 0,`
`"Carrots": 8,`
`"Oranges": 5`
`}`
	`2 Baby Spinach @ $2.78 = $5.56`
	`1 Hot Chocolate @ $3.7 = $3.70`
	`4 Crackers @ $2.1 = $8.40`
	`0 Bacon @ $9.0 = $0.00`
	`8 Carrots @ $0.56 = $4.48`
	`5 Oranges @ $3.08 = $15.40`

Q2) The dictionary below contains several colour names and a counter (defaulted to 0). Your task is to iterate over a list of colours and keep track of the number of times each colour has occurred by updating the corresponding counter in this dictionary.

```
colour_counts = {
      "blue": 0,
      "green": 0,
      "yellow": 0,
      "red": 0,
      "purple": 0,
      "orange": 0,
}
```

colours	**Output**

`colours = [`
`"purple",`
`"red",`
`"yellow",`
`"blue",`
`"purple",`
	`blue: 2`
	`green: 1`
	`yellow: 1`
	`red: 1`
	`purple: 3`
	`orange: 2`

"orange", "blue", "purple", "orange", "green"]	
colours = ["orange", "purple", "blue", "yellow", "green", "green", "purple", "purple", "green", "blue", "green", "orange", "purple", "blue", "green", "orange", "orange", "red", "yellow", "yellow"]	blue: 3 green: 5 yellow: 3 red: 1 purple: 4 orange: 4

Q3) Given the list of names below, create a dictionary where each key is a name and the value is the number of times that name occurs in the list.

names	**Output**
names = ["Maddy", "Bel", "Elnaz", "Gia", "Izzy", "Joy", "Katie", "Maddie", "Tash", "Nic", "Rachael", "Bec", "Bec", "Tabitha", "Teagen", "Viv", "Anna", "Catherine", "Catherine", "Debby", "Gab", "Megan", "Michelle", "Nic", "Roxy", "Samara", "Sasha", "Sophie", "Teagen", "Viv"]	Maddy 1 Bel 1 Elnaz 1 Gia 1 Izzy 1 Joy 1 Katie 1 Maddie 1 Tash 1 Nic 2 Rachael 1 Bec 2 Tabitha 1 Teagen 2 Viv 2 Anna 1 Catherine 2 Debby 1 Gab 1 Megan 1 Michelle 1 Roxy 1

	Samara 1 Sasha 1 Sophie 1
names = ["Miranda", "Sophie", "Emily", "Taylor", "Anne", "Djuarli", "Anika", "Rosie", "Miranda", "Taylor", "Abby", "Sarah", "Teagen", "Abby", "Abby", "Maddie", "Miranda", "Rosie"]	Miranda: 3 Sophie: 1 Emily: 1 Taylor: 2 Anne: 1 Djuarli: 1 Anika: 1 Rosie: 2 Abby: 3 Sarah: 1 Teagen: 1 Maddie: 1

Q4) Read the colour data from `colours_20_simple.csv` and save the data in a dictionary where the key is the hex code and value is the corresponding English name.

file	**Output**
colours_20_simple.csv	#BEBD7F: Green beige #C2B078: Beige #C6A664: Sand yellow #E5BE01: Signal yellow #CDA434: Golden yellow #A98307: Honey yellow #E4A010: Maize yellow #DC9D00: Daffodil yellow #8A6642: Brown beige #C7B446: Lemon yellow #EAE6CA: Oyster white #E1CC4F: Ivory #E6D690: Light ivory #EDFF21: Sulfur yellow #F5D033: Saffron yellow #F8F32B: Zinc yellow #9E9764: Grey beige #999950: Olive yellow #FAD201: Traffic yellow

Q5) Modify your code from the previous exercise to save both the English name and RGB code in a list as the value for the corresponding hex code.

file	**Output**
colours_20_simple.csv	#BEBD7F: ['190-189-127', 'Green beige'] #C2B078: ['194-176-120', 'Beige'] #C6A664: ['198-166-100', 'Sand yellow'] #E5BE01: ['229-190-001', 'Signal yellow'] #CDA434: ['205-164-052', 'Golden yellow'] #A98307: ['169-131-007', 'Honey yellow'] #E4A010: ['228-160-016', 'Maize yellow'] #DC9D00: ['220-156-000', 'Daffodil

	yellow'] #8A6642: ['138-102-066', 'Brown beige'] #C7B446: ['199-180-070', 'Lemon yellow'] #EAE6CA: ['234-230-202', 'Oyster white'] #E1CC4F: ['225-204-079', 'Ivory'] #E6D690: ['230-214-144', 'Light ivory'] #EDFF21: ['237-255-033', 'Sulfur yellow'] #F5D033: ['245-208-051', 'Saffron yellow'] #F8F32B: ['248-243-053', 'Zinc yellow'] #9E9764: ['158-151-100', 'Grey beige'] #999950: ['153-153-080', 'Olive yellow'] #FAD201: ['250-210-001', 'Traffic yellow']