CodeFirstGirls Beginners Python

Homework: Session 4

This session: 1. Lists 1. Dictionaries

Additional resources:

- Lists https://realpython.com/python-lists-tuples/

- Dictionaries https://realpython.com/python-dicts/

Task 1

I have a list of things I need to buy from my supermarket of choice.

```python
shopping_list = [
    "oranges",
    "cat food",
    "sponge cake",
    "long-grain rice",
    "cheese board",
]

print(shopping_list[1])
print(shopping_list[5])
```

I want to know what the first and last things I need to buy are. However, when I run the program it shows me a different answer to what I was expecting?

What is the mistake? How do I fix it?

Task 2

I'm setting up my own market stall to sell chocolates. I need a basic till to check the prices of different chocolates that I sell.

I've started the program to include the chocolates and their prices. Finish the program by asking the user to input the item they want, and then output the total price.

Extension: Ask the user how many of the item they want, then calculate the total price.

```
chocolates = {
    'white': 1.50,
    'milk': 1.20,
    'dark': 1.80,
    'vegan': 2.00,
}
```

Task 3

Write a program that simulates a lottery. The program should have a list of seven numbers that represent a lottery ticket. It should then generate seven random numbers. After comparing the two sets of numbers, the program should output a prize based on the number of matches:

- £20 for three matching numbers
- £40 for four matching numbers
- £100 for five matching numbers
- £10000 for six matching numbers
- £1000000 for seven matching numbers

Task 4

Your friend works for an antique book shop that sells books between 1800 and 1950 and wants to quickly categorise books by the century and decade that they were written. Write a program that takes a year (e.g. 1872) and outputs the century and decade (e.g. "Seventeenth Century, Seventies")