Exercises

1) Create a Person class with a name attribute and a method that prints out the person's name.
2) Create a Rectangle class with height and width attributes and methods to calculate the area and perimeter of the rectangle.
3) Create a BankAccount class with balance attribute and methods to deposit and withdraw money.
4) Create a Car class with make, model, and year attributes and a method that prints out the car's make, model, and year.
5) Create a Dog class with a name attribute and a method that prints out the dog's name and says "woof woof".
6) Create a Cat class with a name attribute and a method that prints out the cat's name and says "meow".
7) Create a Student class with name and age attributes and a method that prints out the student's name and age.
8) Create a Bank class with a list of BankAccount objects and methods to add and remove accounts and to calculate the total balance of all accounts.
9) Create a Book class with title, author, and year attributes and a method that prints out the book's title, author, and year.
10) Create a Movie class with title, director, and year attributes and a method that prints out the movie's title, director, and year.

Exercises and solution

1) Create a Car class with a color attribute and a method to print the color.

```
class Car:
    def __init__(self, color):
        self.color = color

    def print_color(self):
        print("The car's color is", self.color)
```

2) Create a Person class with a name attribute and a method to print the name.

```
class Person:
    def __init__(self, name):
        self.name = name

    def print_name(self):
        print("The person's name is", self.name)
```

3) Create a Rectangle class with height and width attributes and a method to calculate the area.

```
class Rectangle:
    def __init__(self, height, width):
        self.height = height
        self.width = width

    def calculate_area(self):
        return self.height * self.width
```

4) Create a Circle class with a radius attribute and a method to calculate the area.

```
class Circle:
    def __init__(self, radius):
        self.radius = radius

    def calculate_area(self):
        return 3.14 * (self.radius ** 2)
```

5) Create a Dog class with a name attribute and a method to print the name and bark.

```
class Dog:
    def __init__(self, name):
        self.name = name

    def bark(self):
        print(self.name, "says woof!")
```

6) Create a Cat class with a name attribute and a method to print the name and meow.

```
class Cat:
    def __init__(self, name):
        self.name = name

    def meow(self):
        print(self.name, "says meow!")
```

7) Create a Person class with name and age attributes and a method to print the name and age.

```
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age

    def print_info(self):
        print(self.name, "is", self.age, "years old.")
```

8) Create a Student class with name and major attributes and a method to print the name and major.

```
class Student:
    def __init__(self, name, major):
        self.name = name
        self.major = major

    def print_info(self):
        print(self.name, "is majoring in", self.major)
```

9) Create a Book class with title and author attributes and a method to print the title and author.

```
class Book:
    def __init__(self, title, author):
        self.title = title
        self.author = author

    def print_info(self):
        print(self.title, "by", self.author)
```

10) Create a Movie class with title and director attributes and a method to print the title and director.

```
class Movie:
    def __init__(self, title, director):
        self.title = title
        self.director = director

    def print_info(self):
        print(self.title, "directed by", self.director)
```