

Asuar Blaine M.

C204

Finals Task 3. Simple Polymorphism

Source Code:

Main.py:

```
from sparrow import Sparrow
from parrot import Parrot
from birdCage import BirdCage

def main():
    |
    sparrow1 = Sparrow()
    sparrow2 = Sparrow()
    parrot1 = Parrot()
    parrot2 = Parrot()

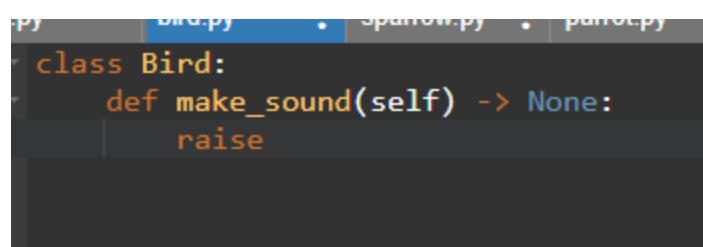
    birds = [sparrow1, parrot1, sparrow2, parrot2]

    cage = BirdCage()

    cage.make_bird_sounds(birds)

if __name__ == "__main__":
    main()
```

Bird.py:



```
class Bird:
    def make_sound(self) -> None:
        raise
```

Sparrow.py:

```
in.py      bird.py      : sparrow.py  : parrot.py
1 from bird import Bird
2
3 class Sparrow(Bird):
4     def make_sound(self) -> None:
5         print("Chirp Chirp")
6
```

Parrot.py :

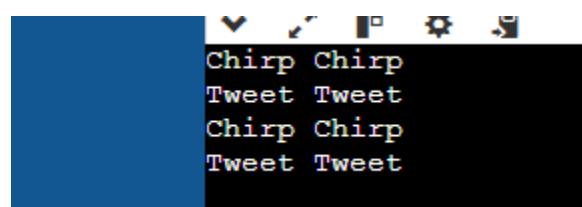
```
from bird import Bird

class Parrot(Bird):
    def make_sound(self) -> None:
        print("Tweet Tweet")
```

BirdCage.py:

```
in.py      bird.py      : sparrow.py  : parrot.py  : birdCage.py
1 from typing import List
2 from bird import Bird
3
4 class BirdCage:
5     def make_bird_sounds(self, birds: List[Bird]) -> None:
6         for bird in birds:
7             bird.make_sound()
8
```

Example OutPut:



A screenshot of a terminal window showing the output of the program. The terminal has a dark background with light-colored text. At the top, there are several small icons. The main area contains four lines of text: "Chirp Chirp", "Tweet Tweet", "Chirp Chirp", and "Tweet Tweet".

```
Chirp Chirp
Tweet Tweet
Chirp Chirp
Tweet Tweet
```