

Conceptual Programming Project

Let's say that you are currently running a zoo in Daegu. You want to introduce animals to kindergarten students. There are two types of catalogs available which are flyer (text) and bar chart.

In this world, we can categorize animals into five groups:-

- 1) Mammal (포유 동물)
- 2) Bird (새)
- 3) Aquatic (물의)
- 4) Reptile (비열한)
- 5) Insect (공충)

All your animals have three attributes: (a) name, (b) species, and (c) groups. These animals are stored in a text file called "animal.txt". The sample of the text file is shown as below.

```
Lucy Dolphin Aquatic
Rambo Tiger Mammal
Kiwi Crocodile Reptile
Jackie Canary Bird
Kate Owl Bird
Boyie Ant Insect
Killer Shark Aquatic
Patty Dove Bird
Thang Snake Reptile
John Bee Insect
Racheal Seaturtle Aquatic
Happy Ladybird Insect
Shadow Eagle Bird
Poo Octopus Aquatic
Simba Lion Mammal
Yoshua Alligator Reptile
Abby Seahorse Aquatic
```

Create a program to generate both the catalogs for the kindergarten student. This project is free style, where you can design the program based on your own idea and creativity.

평가 사항 (Evaluation Points):

1. 소스코드 조직 (Code organization)
2. 클래스 사용법 (Class Usage)
3. Graphics (design, colors, and etc.)
4. Correct and smooth outputs (no errors)
5. Additional features, such as add, delete, or update animal's record.

중요 사항 (Notice):

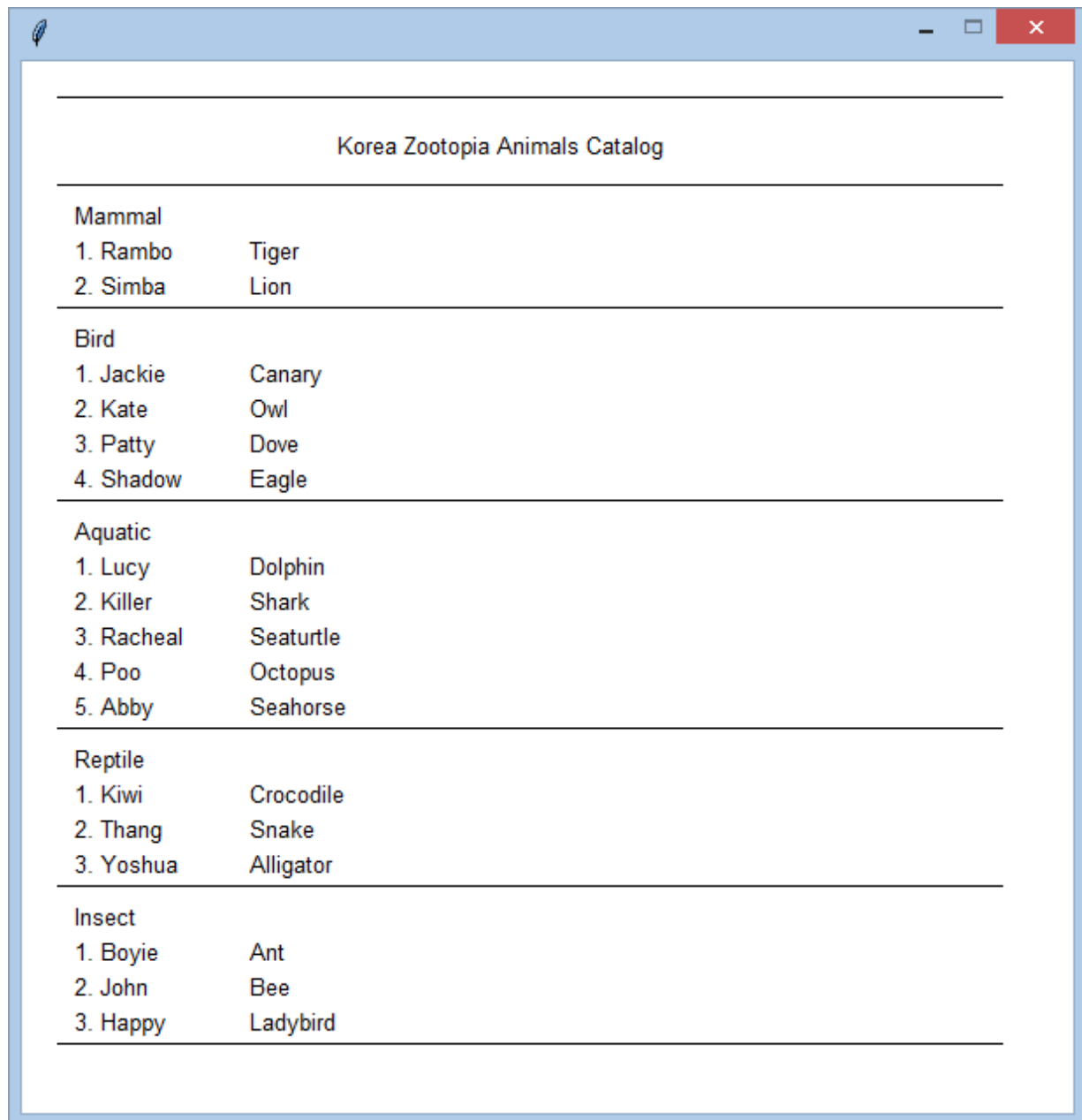
Students are allowed to team up with maximum 3 students to finish this project. Doing solo will get extra bonus, but also based on evaluation points mentioned above.

Sample Output:

```
*****
                        Korea Zootopia
-----
1. Show Zoo Animals Catalog.
2. Display Zoo Animals Charts.
3. Generate Zoo Animals Text Files
*****
Enter your choice: 1
```

Choice 1:

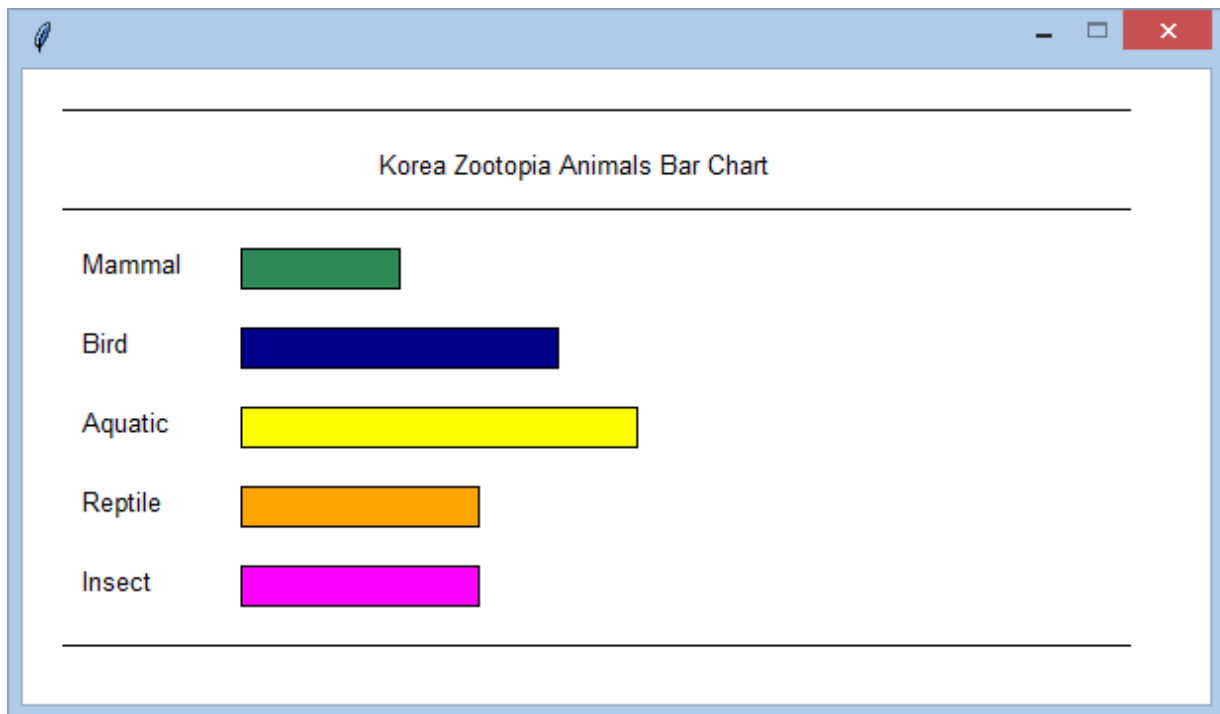
This generates the catalog that categorized animals into their respective groups, showing their name and also their species.



Korea Zootopia Animals Catalog	
Mammal	
1. Rambo	Tiger
2. Simba	Lion
Bird	
1. Jackie	Canary
2. Kate	Owl
3. Patty	Dove
4. Shadow	Eagle
Aquatic	
1. Lucy	Dolphin
2. Killer	Shark
3. Racheal	Seaturtle
4. Poo	Octopus
5. Abby	Seahorse
Reptile	
1. Kiwi	Crocodile
2. Thang	Snake
3. Yoshua	Alligator
Insect	
1. Boyie	Ant
2. John	Bee
3. Happy	Ladybird

Choice 2:

This generates bar chart to illustrate the number of animals in each group in the zoo.



Choice 3:







** This selection generates five different text files for each group of animals.

Korea Zootopia

1. Show Zoo Animals Catalog.
2. Display Zoo Animals Charts.
3. Generate Zoo Animals Text Files

Enter your choice: 3

Catalog generated.

-  animal.txt
-  aquatic.txt
-  birds.txt
-  insect.txt
-  mammals.txt
-  reptile.txt

