

CS118

Problem Solving

Prepare a **Standard Format solution** to this old exam.
Remember to follow the **Simplified Standard Format!**

CS118

Farmer Greenjeans

Farmer Greenjeans wants to make sure that Elsie (his cow) is fed properly. Unfortunately, he is very forgetful and sometimes gets confused when the other animals (goats, pigs, ducks) show up with Elsie – he can't remember whether he fed Elsie or not. On the other hand, he doesn't want to NOT feed the other animals; he just knows that Elsie requires more food. So he's asked you to write him a Python3 program to control his feed chute.

For the first simple version, the program will provide in the command window a menu of animals – simply display the choices as shown. The user chooses one from the menu and an IF-ELIF statement performs the necessary action for that animal. The menu must contain the four animals shown and use the letters shown to choose the animals.

```
D. Ducks
E. Elsie
G. Goats
P. Pigs

Which animal to feed? (D, E, G, P) d
OK, the ducks were fed.
```

```
D. Ducks
E. Elsie
G. Goats
P. Pigs

Which animal to feed? (D, E, G, P) g
OK, the goats were fed.
```

```
D. Ducks
E. Elsie
G. Goats
P. Pigs

Which animal to feed? (D, E, G, P) e
How much food for Elsie (kg)? 100
Elsie was fed 200.0 kg
```

The program should function correctly for choices made as either UPPERCASE or lowercase. For an incorrect choice of animal, print an error message. For all valid animals except Elsie, the action for this simple version is to print a statement to the command window that the animal was fed – use the actual name of the animal. For Elsie, the program will request an amount of food to provide and double it (in case Farmer Greenjeans forgot to feed Elsie), saving that doubled value into a variable. Use that variable when you have the program report that Elsie was fed and how much.

Don't forget your affirmation!