Question 1

1.This code is saved in q1.py

2.This program allows the user to input the name of the flower(str), its number of petals(int), and its price(float).

3.Execute as followings:

```
Input the name of the flower>flower
Input the number of petals>1.3
Input the right number of petals>-5
Input the right number of petals>5
Input its price>asdf
Input the right price>3.5
The name of the flower: flower
The number of petals: 5
The price of the flower: 3.5
```

Question 2

1.This code is saved in q2.py

2.This program allows the user to input a polynomial in standard algebraic notation. This program will output the fist derivative of that polynomial.

3.Execute as followings:

```
Give me a polynomial:3*x^7+x^2-7*x+5
21*x^6+2*x-7
```

Question 3

1.This code is saved in q3.py

2.This program allows the user to input a river length, fishes, bears and steps. This program will simulate an ecosystem and output the ecosystem after every step.

3.Execute as followings:

```
Enter the length of river:8
Enter the number of fish:2
Enter the number of bear:5
['B', 'B', 'B', 'F', 'F', 'N', 'B', 'B']
Enter the number of step:10
['B', 'B', 'B', 'N', 'F', 'B', 'B', 'B']
['B', 'B', 'B', 'B', 'F', 'B', 'B', 'B']
['B', 'B', 'B', 'B', 'N', 'B', 'B', 'B']
['B', 'B', 'B', 'B', 'B', 'B', 'B', 'B']
```