

Q1:

1. This code is saved in Q1.py.
2. This program allows the user to enter the name, number and price of flower as 3 separated variables of a class. They are set as default and the user can use method to change them. Also, the program can handle possible inappropriate inputs.
3. Execute as followings:

```
rose 3 10.0
Please enter the name of flower: Lily
Please enter the number of flower: 5
Please enter the price of flower: 9.05
Lily 5 9.05
```

Q2:

1. This code is saved in Q2.py.
2. This program allows the user to enter a polynomial in standard algebraic notation and return its first derivative.
3. Execute as followings:

```
Please enter a polynomial in standard algebraic notation.
(default as 6*x^5-3.5*x+3.64-3.5*x^2+2.5*x^4)
>>
30*x^4-3.5-7*x+10*x^3
```

Q3:

1. This code is saved in Q3.py.
2. This program simulates the ecosystem of a river. It allows the user to enter the length

of river, the number of fish and the number of bears at first. Then the animals are created randomly on the river. And it will ask the user to enter the steps of simulation and work under the rules.

3. Execute as followings:

```
FNNFBBFFNN
How many times?
>>5
FNNBNNBFNN
NFBNNBNFNN
NFNBBNFNNN
NNBNNBNFNN
NNNBNNNFN
```