Question 2

```
from fractions import Fraction as f
b1w = int(input("Enter total number of white balls in bag 1"))
b1b = int(input("Enter total number of black balls in bag 1"))
b2w = int(input("Enter total number of white balls in bag 2"))
b2b = int(input("Enter total number of black balls in bag 2"))
p1 = (b1b/(b1w + b1b))
p2 = (b2b/(b2w + b2b))
pbag = f(1/2)
final = ((pbag *p2)/((pbag * p1) + (pbag * p2)))
print(final)
```

Question 3   # Output :-

```
Enter total number of white balls in bag 1 4
Enter total number of black balls in bag 1 4
Enter total number of white balls in bag 2 6
Enter total number of black balls in bag 2 3
0.4
```

Question 3

```
from fractions import Fraction as f
p1 = int(input("enter total no. of cases when person lies truth:"
t = int(input("enter total no. of time a person speak:"))
p4 = f(1/6)
notp4 = f(1 - 1/6)
c = f(p1/t)
d = f(1-c)
a = f((p4*c)/((p4*c) + (notp4*d))
print(d)
```

Output :-
enter total no. of cases when person lies truth : 2
enter total no. of time a person speak : 3
0.333333.