1) Write a Python program which accepts a list named : randomList = ['a', 0,2]. Use exception handling using try-catch which gives the output as:

```
Output
 1) If the List element is a alphabet or string, the output will be
 The entry is a
 Oops! <class 'ValueError'> occured.
 Next entry.
 2) If the List element is “0”,the output will be
 The entry is 0
 Oops! <class 'ZeroDivisionError'> occured.
 Next entry.
 3) If the List element is and integer except 0,then output will be
 The entry is 2
 The reciprocal of 2 is 0.5 // reciprocal of an integer
```

In [5]:
```
def List_reciprocal(list1):
    for l in list1:
        print("The entry is {}".format(l))
        try:
            r = 1/l
        except Exception as ex:
            print("Oops! {} occured.".format(ex.__class__))
        else:
            print("The reciprocal of {} is {}".format(l,r))
        finally:
            print("Next entry.")

randomList=['a',0,2]
List_reciprocal(randomList)
```

```
The entry is a
Oops! <class 'TypeError'> occured.
Next entry.
The entry is 0
Oops! <class 'ZeroDivisionError'> occured.
Next entry.
The entry is 2
The reciprocal of 2 is 0.5
Next entry.
```

2) Array out of Bound Exception

Write a Python program to give exception “Array Out of Bound” if the user wants to access the elements beyond the list size (use try and exce pt)

In [13]:
```
def AOB(list1,index):
    try:
        print("The value is {}".format(list1[index]))
    except IndexError:
        print("Array Out of Bound")

l1=[0,2,4]
AOB(l1,3)
```

```
Array Out of Bound
```

In [ ]:
```
palindrome("Madam")
palindrome("Testing")
palindrome("trainairt")
```

3) Write a python module script that contains fib2() method to calculate the fibonacci series till 1000 and save it as fibo.py.

Note : The module created as fibo.py has to be placed in lib folder

For linux/ubuntu path = /home/anaconda/lib/python3

For Windows path = C:\Users\Ajit\Anaconda3\Lib

In [2]:
```
import fibo
fibo.fib2(1000)
```

Out[2]:
```
[1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987]
```

4) Write a python module script that contains ispalindrome() method tocalculate the input string as palindrome string or not and save it as palindrome.py

In [5]:
```
import palindrome as p
p.palindrome("Madam")
p.palindrome("Testing")
p.palindrome("Anna")
p.palindrome("Anil")
p.palindrome("Noon")
p.palindrome("AfterNoon")
p.palindrome("Racecar")
```

```
Madam is a palindrome
Testing is not a palindrome
Anna is a palindrome
Anil is not a palindrome
Noon is a palindrome
AfterNoon is not a palindrome
Racecar is a palindrome
```

In [ ]:
```
```