EXERCISES:

EXCEPTIONS

- write a function *ratio_list*() to compute the ratio of first two elements in a list
- the function must be capable to catch the following errors:

(a) IndexError

(b) ZeroDivisionError

- if an exception is generated, function should return *None*

Solution:

```
def ratio_list(x):
    result = None
    try:
        result = x[1]/x[0]
    except IndexError as e:
        print("input: ", x, "error: ", e)
    except ZeroDivisionError as e:
        print("input: ", x, "error: ", e)
    except:
        print("input: ", x, " some error ")
    return result

x_1 = [1, 2];  res_1 = ratio_list(x_1)
print("the result for ", x_1, " is ", res_1)
x_2 = [1]; res_2 = ratio_list(x_2)
print("the result for ", x_2, " is ", res_2)

x_3 = [0, 1]; res_3 = ratio_list(x_2)
print("the result for ", x_3, " is ", res_3)
x_4 =  10; res_4 = ratio_list(x_3)
print("the result for ", x_4, " is ", res_4)
```

```
the result for  [1, 2]  is  2.0
input:  [1] error:  list index out of range
the result for  [1]  is  None
input:  [1] error:  list index out of range
the result for  [0, 1]  is  None
input:  [0, 1] error:  division by zero
the result for  10  is  None
```