# Programming Language Learning Series
# Mastery of Python Language
## (Interview Questions/Assignment-Streaming)

Q1: Create a list with the values 1,2,4,6,6,9,10,11,14. Use indexing to
- print the 3rd value
- print the last 2 values
- print only the odd values

Q2: By using list comprehension, please write a program for the following:
- print the list after removing numbers which are divisible by 3 and 5 in [5, 10, 40, 7, 53, 31, 12, 101]
- print the list after removing the 0th, 2nd, 4th,6th numbers in [5, 10, 40, 7, 53, 31, 12, 101]
- generate a 3 * 4 2D-list whose elements are initialized to 0
- generate 2*3*5 3D-list whose each elements are initialized to 0

Using only the Python standard library, find only rows showing the 3rd, 4th and 5th heaviest animals in the file animals.txt

```
In [22]:
with open('../data/animals.txt') as f:
    f.readline() # skip header row
    rows = []
    for line in f:
        row = line.strip().split('|')
        rows.append(row)
    sorted_rows = sorted(rows, key=lambda x: float(x[-1]))
sorted_rows[2:5]
```

Using only the Python standard library, find all files in the current directory and all its sub-directories that contain the word `elephant` regardless of case.

```
In [35]:
import os

for root, dirs, files in os.walk('.'):
    for f in files:
        try:
            if 'elephant' in open(f).read():
                print(f)
        except FileNotFoundError:
            pass
```