My Project

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

Chapter 2

Namespace Documentation

2.1 python_problem Namespace Reference

Functions

- def make (filename)
- def fun1 (l)
- def fun2 (l, x)
- def fun3 (L)

Variables

- def **L** = make("data")
- def **ans** = fun2(L, 48)

2.1.1 Detailed Description

This program four different functions, all of them involving arrays

2.1.2 Function Documentation

2.1.2.1 fun1()

```
def python_problem.fun1 (
              l )
```

Parameters

l	a list of any data type, provided that ordering for such data exists

Returns

the original list, but with elements sorted in ascending order

This function implements the bubblesort algorithm to sort a given array, this function builds the sorted array from end of the array

2.1.2.2 fun2()

```
def python_problem.fun2 (
              l,
              x )
```

Parameters

l	the sorted list (of integers) to be used for searching
x	any data type which can be converted to integer

Returns

the number of iterations in which binary search finds a given integer

This function finds the number of binary searches it takes to find a given number in a list, but returns -1 if element is not found

2.1.2.3 fun3()

```
def python_problem.fun3 (
              L )
```

Parameters

L	any nxn matrix (list of 2 dimensions)

Returns

the determinant of the input matrix

This function computes the determinant of a given matrix, by recursively calling itself and reducing the matrix size each time

2.1.2.4 make()

```
def python_problem.make (
              filename )
```

Parameters

filename	the string which contains the path of the file to be read

Returns

a list of elements where each element is a line from file

This function loads and reads a given file and stores each line of the file in the form of a list

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