

## 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:

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## Chapter 2

# Namespace Documentation

### 2.1 python\_problem Namespace Reference

#### Functions

- def `make` (filename)  
*Making a list from file input.*
- def `fun1` (l)  
*A function to sort a list in ascending order Parameters.*
- def `fun2` (l, x)  
*A function to do a Binary Search.*
- def `fun3` (L)  
*A function to calculate determinant of a square matrix.*

#### Variables

- `L = make`("data")  
*variable to hold List from make function*
- `ans = fun2`(L, 48)  
*variable to hold result from fun2 function*

#### 2.1.1 Detailed Description

```
@package python_problem
The function involves:
1.Reading from file
2.Making a list from file input
3.Sorting List
4.Doing a binary search on sorted list
5.Finding determinant of square matrix
```

#### 2.1.2 Function Documentation

##### 2.1.2.1 def python\_problem.fun1 ( l )

A function to sort a list in ascending order Parameters.

**Parameters**

<code>l</code>	: integer list
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**Returns**

`l` : integer list sorted in ascending order

A function to sort a list in ascending order

Parameters

-----

`l` : integer list

Returns

-----

`l` : integer list  
sorted in ascending order

**2.1.2.2 def python\_problem.fun2 ( `l`, `x` )**

A function to do a Binary Search.

**Parameters**

<code>l</code>	: integer list
<code>x</code>	: Element to be searched in sorted list <code>l</code>

**Returns**

`probes` : number of comparisons done to search `x` in list `l` -1 if `x` not found in list `l`

A function to do a Binary Search

Parameters

-----

`l` : integer list  
sorted in ascending order

`x` : int  
Element to be searched in sorted list `l`

Returns

-----

`probes` : number of comparisons done to search `x` in list `l`  
-1 if `x` not found in list `l`

**2.1.2.3 def python\_problem.fun3 ( `L` )**

A function to calculate determinant of a square matrix.

**Parameters**

<code>L</code>	: 2-D square matrix
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**Returns**

**d** : determinant of square matrix

A function to calculate determinant of a square matrix

Parameters

-----

**L** : list

2-D square matrix

Returns

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**d** : int

determinant of square matrix

**2.1.2.4 def python\_problem.make ( filename )**

Making a list from file input.

**Parameters**

<i>filename</i>	: The file location of the datafile
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**Returns**

**l** : integer list

Parameters

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**filename** : str

The file location of the datafile

Returns

-----

**l** : integer list



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