

...cont'd

- 1 Launch a plain text editor and begin a new Python program by locating the interpreter
`#!/usr/bin/env python`
- 2 Create and display a set of three color items
`bag = { 'Red', 'Green', 'Blue' }`
`print('Set: ' + str(bag))`
- 3 Next, add an item to the set and display it once more
`bag.add('Yellow')`
`print('Enlarged Set: ' + str(bag))`
- 4 Now, search the set for an item and display the result
`print('Is Green In Set?: ' + str('Green' in bag))`
- 5 Then, create and display a frozen set of three color items
`frozenbag = frozenset({ 'Red', 'Purple', 'Yellow' })`
`print('Frozen Set: ' + str(frozenbag))`
- 6 Finally, display only those items that appear in both sets
`print('Common To Both Sets: ' + str(bag.intersection(frozenbag)))`
- 7 Save the file and make it executable with `chmod` then run the program to see the list get modified inside the tuple



set.py

```
pi@raspberrypi: ~
File Edit Tabs Help
pi@raspberrypi ~ $ chmod 755 set.py
pi@raspberrypi ~ $ ./set.py
Set: set(['Blue', 'Green', 'Red'])
Enlarged Set: set(['Blue', 'Green', 'Yellow', 'Red'])
Is Green In Set?: True
Frozen Set: frozenset(['Purple', 'Red', 'Yellow'])
Common To Both Sets: set(['Yellow', 'Red'])
pi@raspberrypi ~ $
```

Don't forget



Try adding an item to the frozen set to see the program report an error on execution – you are not allowed to change an immutable frozen set.