

# Type Contract Appendix

Data Type	Syntax	Example
Object	<code>"obj"</code>	<code>""(obj) -&gt; obj""</code>
String	<code>"str"</code>	<code>""(str) -&gt; str""</code>
Integer	<code>"int"</code>	<code>""(int) -&gt; int""</code>
Float	<code>"float"</code>	<code>""(float) -&gt; float""</code>
Boolean	<code>"bool"</code>	<code>""(bool) -&gt; bool""</code>
NoneType	<code>"NoneType"</code>	<code>""() -&gt; NoneType""</code>
List	<code>"list" or "list of (&lt;datatype&gt;)"</code>	<code>""(list of (str)) -&gt; list of (str or int)""</code>
Tuple	<code>"tuple" or "tuple of (&lt;datatype&gt;)"</code>	<code>""(tuple of (str)) -&gt; tuple of (str or int)""</code>
Set	<code>"set" or "set of (&lt;datatype&gt;)"</code>	<code>""(set of (str)) -&gt; set of (str or int)""</code>
Dictionary	<code>"dict" or "dict of {&lt;datatype&gt;:&lt;datatype&gt;}"</code>	<code>""(dict of {str:int}) -&gt; dict of {int:str}""</code>
Other Objects	<code>"&lt;class name&gt;"</code>	<code>""(io.TextIOWrapper) -&gt; NoneType""</code>

## Notes:

- Characters in **blue** are required and should not be changed
- Characters in **orange** are supposed to be replace. These can be replaced with any other data type that follows the formatting of this appendix
- To denote that an argument can be one of two types use the **"or"** operator as such: `"<type1> or <type2>"`. This is acceptable with any of the above data types
- Containers (List, Tuple, Set, Dictionary) can contain other containers. This is illustrated by the following example:  
`"list of (tuple of (set of (dict of {int:str})))"`