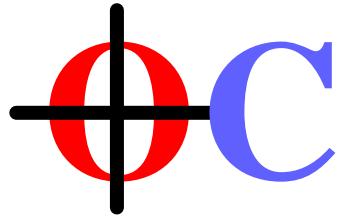# 4. Fundamental Objects

To make a working objective system, you need Fundamental Objects.

Fundamental Objects are used to create the Coda-C Core functions.

- Array
- Dictionary
- Char
- ConstChar

Array is a dynamic ordered list of objects.

Dictionary is a collection of objects referenced by key.

Char is a string object.

ConstChar is a transparent subclass of Char for string constants.

```
Array functions:

int  Array_count(Array self);
Obj  Array_addObject(Array self,Obj obj);
void Array_takeObject(Array self,Obj $CONSUMED obj);
Obj  Array_subInt(Array self,int ix);
void Array_insertAt(Array self,int ix,Obj obj);
void Array_replaceAt(Array self,int ix,Obj obj);
void Array_removeAt(Array self,int dix);
void Array_set_name(Array self,char* name);
Char Array_name(Array self);


Dictionary functions:

int  Dictionary_count(Dictionary self);
void Dictionary_setKey(Dictionary self,char *key,Obj obj);
void Dictionary_takeKey(Dictionary self,char *key,Obj $CONSUMED obj);
Obj  Dictionary_subKey(Dictionary self,char *key);
bool Dictionary_removeKey(Dictionary self,char *key);
Pointer Dictionary_AllKeys(Dictionary self);
void Dictionary_set_name(Dictionary self,char* name);
Char Dictionary_name(Dictionary self);


Char functions:

Char Char_Value(const char *string);
Char $FORMAT12 Char_F(char *cs,...);


ConstChar strings:

Os("immutable string");
```