Rebeca	Explanation	Assembly	Example
Global Variable Definition	global variables are often placed in the .data or .bss sections depending on whether they are initialized or uninitialized. When the code actually run on the processor, an arbitrary address assigned to every entity inside "Data_Table".	- Place the variable in the .data section. - Use the appropriate directive (e.g., DS8 for 32-bit integers, etc.).	SECTION `.bss`:DATA:REORDER:NOROOT(2) DATA My_var_name: DS8 64 ??DataTable_xxx: DATA32 DC32 My_var_name
Global Variable Usage		- Read address of the variable through automatically generated Data_Table - Do the operation (store, load,…) on the selected address	// My_var_name=New_Value MOVS R1,# New_Value LDR.N R0,??DataTable_xxx STR R1,[R0, #+0]

Local Variable Definition	Local variables saved in current branch(function) stack, and once the function returns, the space on the stack is freed up for future function calls.	- Choose an arbitrary constant C
		- Assign memory location with offset C from beginning of the stack with appropriate length to the variable.
			// int a=97; here, C is 4.
			MOV R1,SP
			MOVS R0,#+97
			STR R0,[R1, #+4]

Local Variable Usage		- Do the operation (store, load,…) on the memory location with offset C from the beginning of the stack.	// a=100;
			MOV R1,SP
			MOVS R0,#+100
			STR R0,[R1, #+4]

Function Definition	For running subroutines, Branch and Link and Branch and Exchange are utilized. Branch and Link, Branches to the memory location identified by label and sets the link register, LR, to the address of the instruction after the BL. Branch and Exchange, Branches to the address stored in selected register (here LR, that point to the instruction after the BL instruction).	- Place function name as a tag. - Use "Branch_And_Exchange" instruction with Link_Register to go back to main branch.	function_name: BX LR
Function Call		Use "Branch_And_Link" instruction with function name.	BL function_name
Reactive Class	Each reactive class will be mapped to separate ARM processor(the "real" actor that corresponds to rebeca actor)	Separate *.s file (assembly file)	
Massage Server	Each massage server will be mapped to separate function	A function with the same name as corresponding massage server	

Arithmetic (+, -, / ,etc)		Corresponding assembly instructions (add, sub, … etc)	