

PyFoMaC – Language Comparison Cheat Sheet

	C	Fortran 90	Fortran 77	Python	Matlab
adds	+	+		+	+
subtracts	-	-		-	-
multiplies	*	*		*	*
power	#include <math.h> pow(a,b)	**		**	^
divides	/	/		/ or // (floor div)	/
modulus	%	mod(a,b)		%	%
increments	i++	i = i+1		i += 1	i = i+1
decrements	i--	i = i-1		i -= 1	i = i-1
equals	==	==	.eq.	==	==
not equals	!=	/=	.ne.	!=	~=
less than	<	<	.lt.	<	<
greater than	>	>	.gt.	>	>
< or equal to	<=	<=	.le.	<=	<=
> or equal to	>=	>=	.ge.	>=	>=
logical or		.or.		or	
logical and	&&	.and.		and	&&
logical not	!	.not.		not	~
true	anything but 0	.true.		True	True
false	0	.false.		False	False
if	if (cond.) { instr.; } else if (cond.) { instr.; } else { instr.; }	if (cond.) then instr. else if / elseif (cond.) then instr. else instr. endif / end if		if cond.: instr. elif cond.: instr. else: instr.	if cond. instr. elseif cond. instr. else instr. end
for	for (i=0,i<n,i++) { instr.; }	do i=1,n instr. enddo	do 10,i=1,n instr. 10 continue	for i in range(n): instr.	for i=1:n instr. end
while	while (cond.) { instr.; }	do while (cond.) instr. end do	do 10 while (cond.) instr. 10 continue	while cond.: instr.	while cond. instr. end
next iteration	continue;	cycle		continue	continue
exits loop	break;	exit		break	break
exits program	return 1;	call exit([status])		import sys sys.exit()	return
multiple line statement	continue until next ;	&		\	...
comment	// or /* ... */	!		#	%