Language	MATLAB/Octave	Python	R
1,2,3, … ,10	`1:10`	`arange(1,11, dtype=Float)` `range(1,11)`	`seq(10)` or `1:10`
0.0,1.0,2.0, … ,9.0	`0:9`	`arange(10.)`	`seq(0,length=10)`
1,4,7,10	`1:3:10`	`arange(1,11,3)`	`seq(1,10,by=3)`
10,9,8, … ,1	`10:-1:1`	`arange(10,0,-1)`	`seq(10,1)` or `10:1`
10,7,4,1	`10:-3:1`	`arange(10,0,-3)`	`seq(from=10,to=1,by=-3)`
Linearly spaced vector of n=7 points	`linspace(1,10,7)`	`linspace(1,10,7)`	`seq(1,10,length=7)`
Reverse	`reverse(a)`	`a[::-1]` or	`rev(a)`
Set all values to same scalar value	`a(:) = 3`	`a.fill(3), a[:] = 3`	