

A exact executable command likes this:

```
mpiexec -n <ncpu> ./<exename> <option1> <option2> ...
```

Option	Default	Description
-Nx <value>	200	Number of points along x-direction
-Ny <value>	101	Number of points along y-direction, notes that $N_y \% 2 = 1$
-Nz <value>	10	Number of points along z-direction
-Lx <value>	2	Streamwise length
-Lz <value>	0.05	Spanwise length
-Pr <value>	10	Prandtl number $Pr = \frac{\nu}{\kappa_T}$
-Ra <value>	$10^3$	Thermal Rayleigh number $Ra_T = \frac{g\alpha\Delta TH^3}{\nu\kappa_T}$
-Le <value>	100	Lewis number $Le = \frac{\kappa_T}{\kappa_S}$
-Rr <value>	2	Density stability ratio $R_\rho = \frac{\alpha\Delta T}{\beta\Delta S}$
-Ua <value>	0	X-velocity at lower wall, $U(y=a)$
-Ub <value>	0	X-velocity at upper wall, $U(y=b)$
-Wa <value>	0	Z-velocity at lower wall, $W(y=a)$
-Wb <value>	0	Z-velocity at upper wall, $W(y=b)$
-Ta <value>	0	Temperature at lower wall, $T(y=a)$
-Tb <value>	1	Temperature at upper wall, $T(y=b)$
-Sa <value>	0	Salinity at lower wall, $S(y=a)$
-Sb <value>	1	Salinity at upper wall, $S(y=b)$
-T0 <value>	0	Start time of DNS
-T <value>	20	Final time of DNS

Option	Default	Description
-dt <value>	0.03125	Timestep
-dT <value>	1	Save interval
-nl <value>	"rot"	Method of calculating nonlinearity, one of [rot conv div skew alt linear]

Examples:

```
mpiexec -n 16 ./ddc_simulateflow -Pr 10 -Ra 1000 -Le 100 -Rr 2 -dt 0.02 -dT 1 -T 100 \
-Nx 200 -Ny 81 -Nz 10 -Lx 2 -Lz 0.02 -bf "laminar" -nl "conv"
```