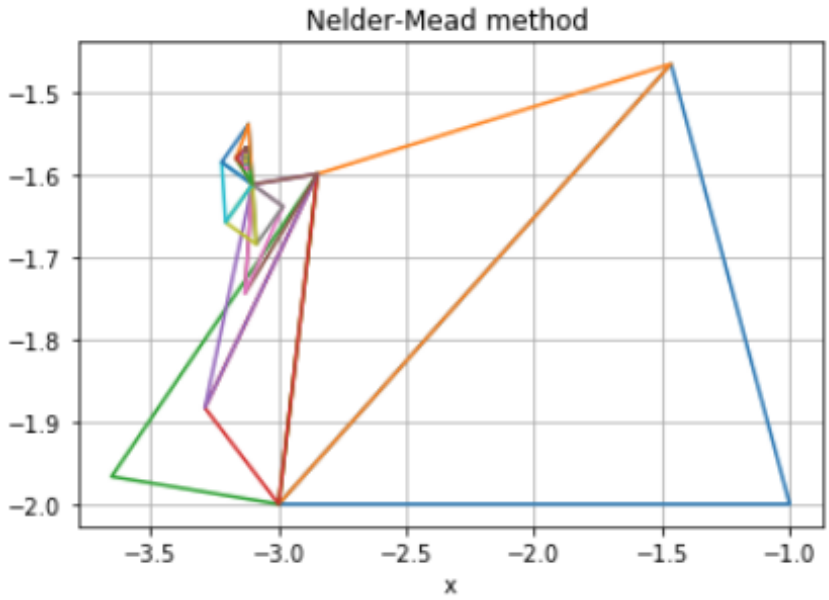
Task #3

Given:

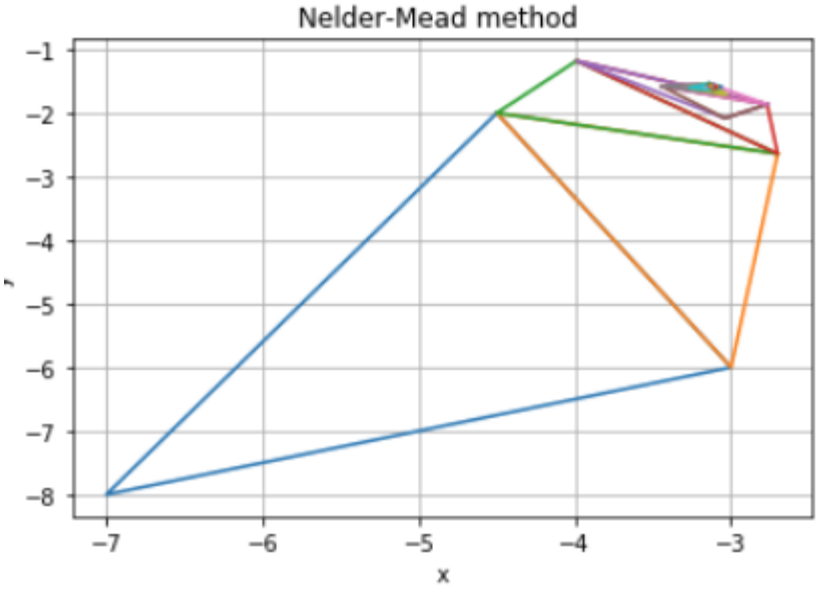
eps = 1e-6
refl, expan, contr = 1, 0.5, 2
simplex = list([(-1.0,-1.0),(-1.0,-2.0), (-3.0,-2.0)])

Result:

func_min = `-106.76453076037151  iterations =  53`
test point (`[-3.13004039 -1.58210909]`)

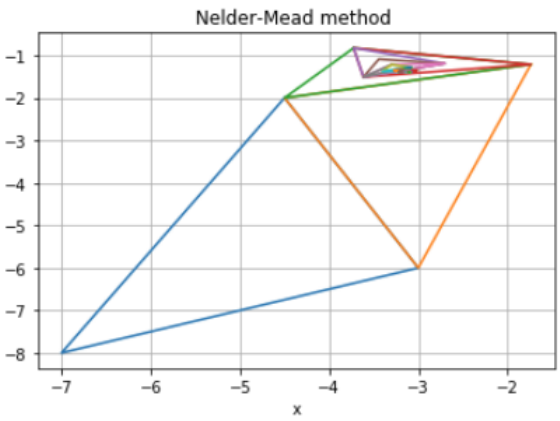


Given:
eps = 1e-6
refl, expan, contr = 1, 0.5, 2
simplex = list([(-4.5,-2.0),(-3.0,-6.0), (-7.0,-8.0)])
Result:
func_min = `-106.76453674925574  iterations =  47`
`test point [-3.13024566 -1.58214159]`

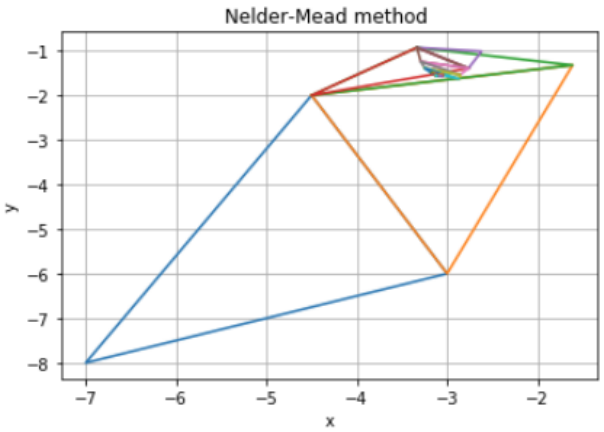


Given:
eps = 1e-6
simplex = list([(-4.5,-2.0),(-3.0,-6.0), (-7.0,-8.0)])

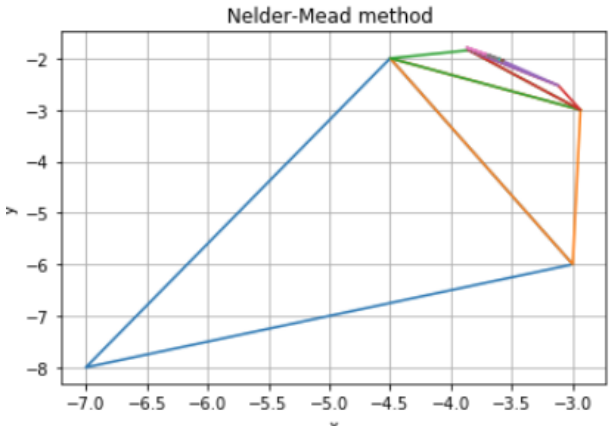
#	F min	Last Point	reflection	expansion	contraction	iterations
1	`-106.764536749`	`-3.13024477 -1.58214304`	1	0.5	2	47
2	-102.027	`-3.0997595  -1.39631015`	2	0.25	1.5	95
3	`-106.66637667`	`-3.1189989  -1.55781545`	0.75	0.75	1.75	69
4	`-63.867308`	`-3.58028,-2.037996`	0.25	0.75	1.2	25
5	`-106.76453`	`-3.13024477 -1.58214304`	1.5	1.75	4.2	64



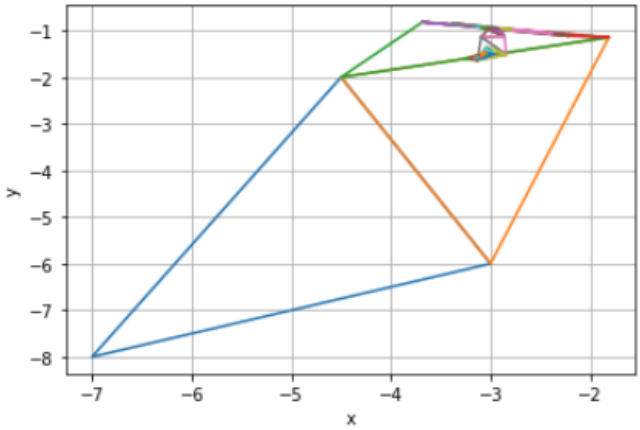
Case 2: min = -102.027



Case 3: min =`-106.666`



Case 4: min = `-63.867`



Case 5