

mod steps: Selection
these mo
tion.
main
on

	Fitness	
11100	0.257	1
11011	0.239	1
11111	0.315	2
11000	0.189	0

step2: Crossover

String Number	Mating pool after reproduction	Mate (randomly selected)	Crossover site (random)	New Population	x-value	$f(x) = x^2$
1	111 00	3	3	11111	31	961
2	11 011	4	2	11111	31	961
3	111 11	1	3	11100	28	784
4	11 111	2	2	11011	27	729

step3: Mutation

String Number	Population after crossover	Mutation point	Population After Mutation	x-value	$f(x) = x^2$
1	11111	11111 5	11110	30	900
2	11111	2	10111	23	529
3	11100	4	11110	30	900
4	11011	3	11111	31	961