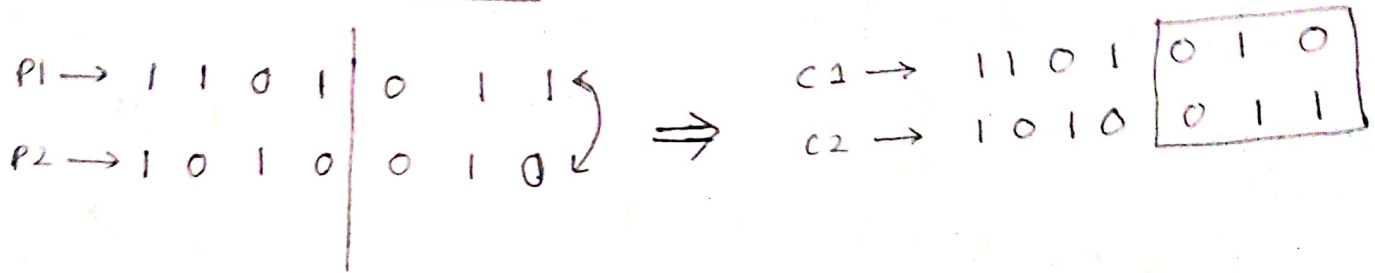
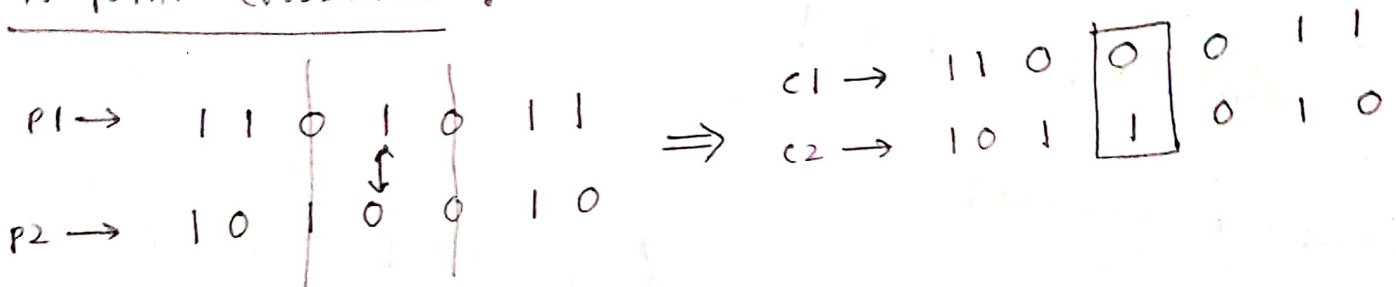


Types of crossover

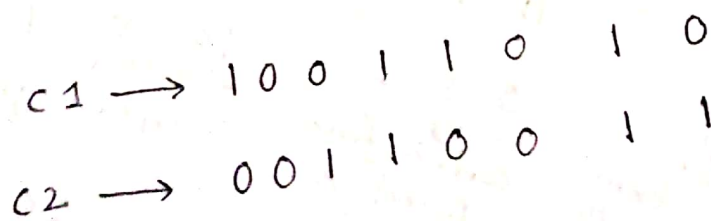
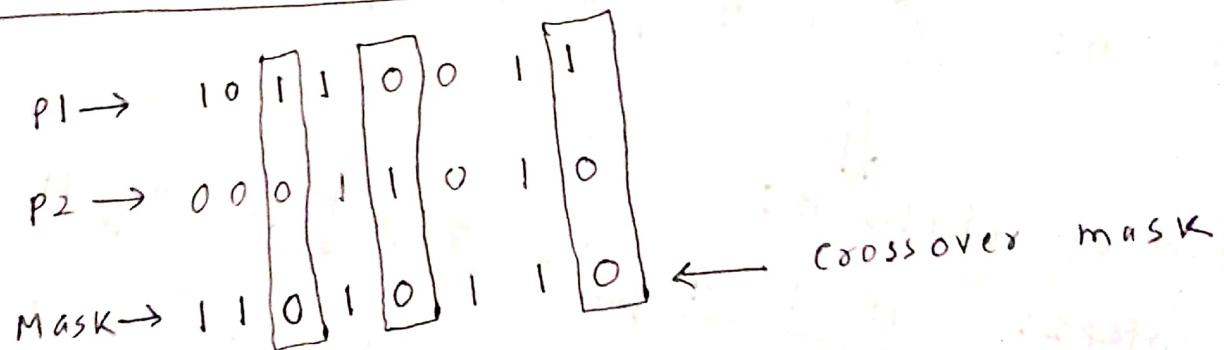
Single point Crossover :



N-point Crossover :



Uniform Crossover :



Partially Matched Crossover (PMX)

Partially Mapped Crossover
- for TSP problem

Parent A: 4 8 (7) | 3 6 5 | 1 10 9 2
 Parent B: 3 1 4 | 2 7 9 | 10 8 (6) 5

child A: 4 8 (6) | 2 7 9 | 1 10 5 3
 child B: 2 1 4 | 3 6 5 | 10 8 (7) 9

Ordered Cross Over:

Parent A: 4 8 7 | 3* 6 (5) | 1 10 9 2
 Parent B: 3* 1 4 | 2 7 9 | 10 8 6 (5)

creation of child B:

step1: H 1 4 | 2 7 9 | 10 8 H H

step2: 2 7 9 | H H H | 10 8 1 4

step3: 2 7 9 | 3 6 5 | 10 8 1 4
 copied from parent B copied from parent A copied from parent B

creation of child A:

step1: 4 8 H | 3 6 5 | 1 10 H H

step2: 3 6 5 | H H H | 1 10 4 8

step3: 3 6 5 | 2 7 9 | 1 10 4 8
 copied from parent A copied from parent B copied from parent A