Map

Input  Mapper  Output

Reduce

Input  Reducer  Output

Shuffle key/value

sent

HDFS input data folder

Update new

Delete old input folder

save

HDFS output data

Gene-1, island-id, particle-id, position, velocity, fitness, pbest, pbest-position, gbest, gbest-position
Gene-1, island-id, particle-id, position, velocity, fitness, pbest, pbest-position, gbest, gbest-position

Gene-n, island-id, particle-id, position, velocity, fitness, pbest, pbest-position, gbest, gbest-position
Gene-n, island-id, particle-id, position, velocity, fitness, pbest, pbest-position, gbest, gbest-position

...