

```
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```

```
clear all  
clc
```

```
%displays original curve-----
```

```
%possible values-----
```

```
problem_domain(1,:) = 1:1:10;  
problem_domain(2,:) = 1:1:10;  
problem_domain(3,:) = 1:1:10;  
problem_domain(4,:) = 1:1:10;  
problem_domain(5,:) = 1:1:10;
```

```
%search paramenters-----
```

```
num_iterations = 1000;  
search_depth = 100;
```

```
%populate weight matrix-----
```

```
tic;  
weight_matrix = Mem_Optimization_Fill_Matrix_GB(problem_domain, search_depth);  
toc
```

```
%explore state space-----
```

```
tic;  
[prior_problem_domain weight_matrix] =  
Mem_Interf_Rand_Optimization_PrePopMatrix_GB(problem_domain, num_iterations,  
search_depth, weight_matrix);  
toc
```

```
%refine best solutions state space-----
```

```
tic;  
final_problem_domain =  
Mem_Interf_Rand_Optimization_FinalStep_GB(problem_domain, num_iterations,  
search_depth, weight_matrix, prior_problem_domain)  
toc
```

```
%plots results-----
```

```
[approx_goal approx_quantity] = eval_goal_function(problem_domain,  
final_problem_domain)
```