

Tables Results in Detail according to the suggested Dataset

Table (2) shows the matching test for the image in figure (15-a)

Table 2: Binary Mapping of Features' Fusion Tester for Main Golden Fish 1

Image Name	Cost after Iteration 0	Cost after Iteration 19900	Binary Features Matching	Accuracy	Expected Output	Predicted Output
MGF1	0.691739	0.000001				
GF1	0.673164	0.000001	111	1.0	1	1.0
GF2	0.689875	0.000001	111	1.0	1	1.0
GF3	0.700280	0.000371	000	1.0	0	0.0
GF4	0.680518	0.000001	111	1.0	1	1.0
GF5	0.695196	0.000371	000	1.0	1	0.0
GF6	0.713828	0.000370	100	1.0	1	0.0
GF7	0.705951	0.000371	000	1.0	1	0.0
GF8	0.719571	0.000369	000	1.0	1	0.0
GF9	0.719946	0.000369	000	1.0	1	0.0
GF10	0.702675	0.000371	100	1.0	1	0.0
GF11	0.712439	0.000370	000	1.0	1	0.0
GF12	0.679641	0.000001	000	1.0	1	1.0
GF13	0.711959	0.000370	000	1.0	1	0.0
GF14	0.693147	0.006859	100	1.0	1	0.0
GF15	0.706860	0.000370	100	1.0	1	0.0
GF16	0.693486	0.000371	100	1.0	1	0.0
GF17	0.721998	0.000369	110	1.0	1	0.0
GF18	0.703345	0.000371	110	1.0	1	0.0
GF19	0.693147	0.006859	100	1.0	1	0.0
GF20	0.693147	0.006859	100	1.0	1	0.0
GF21	0.693147	0.006859	100	1.0	1	0.0

Table (3) shows the matching test for the image in figure (15-b)

Table 3: Binary Mapping of Features' Fusion Tester for Main Golden Fish 2

Image Name MGF2	Cost after Iteration 0	Cost after Iteration 19900	Binary Features Matching	Accuracy	Expected Output	Predicted Output
	0.660659	0.000001				
GF1	0.693147	0.006859	100	1.0	1	0.0
GF2	0.693147	0.006859	100	1.0	1	0.0
GF3	0.700280	0.000371	000	1.0	1	0.0
GF4	0.705938	0.000371	100	1.0	1	0.0
GF5	0.674682	0.000001	111	1.0	1	1.0
GF6	0.672886	0.000001	111	1.0	1	1.0
GF7	0.705951	0.000371	000	1.0	1	0.0
GF8	0.719571	0.000369	000	1.0	1	0.0
GF9	0.709997	0.000370	101	1.0	1	0.0
GF10	0.702675	0.000371	000	1.0	1	0.0
GF11	0.712439	0.000370	000	1.0	1	0.0
GF12	0.706838	0.000370	101	1.0	1	0.0
GF13	0.660695	0.000005	111	1.0	1	1.0
GF14	0.693147	0.006859	000	1.0	1	0.0
GF15	0.706860	0.000370	000	1.0	1	0.0
GF16	0.693486	0.000371	000	1.0	1	0.0
GF17	0.665105	0.000001	111	1.0	1	1.0
GF18	0.703345	0.000371	100	1.0	1	0.0
GF19	0.693147	0.006859	110	1.0	1	0.0
GF20	0.693147	0.006859	110	1.0	1	0.0
GF21	0.693147	0.006859	110	1.0	1	0.0

Table (4) shows the matching test for the image in figure (15-c)

Table 4: Binary Mapping of Features' Fusion Tester for Pens Holder

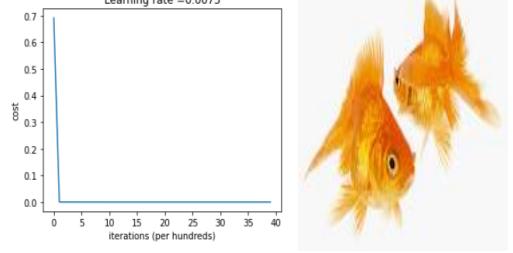
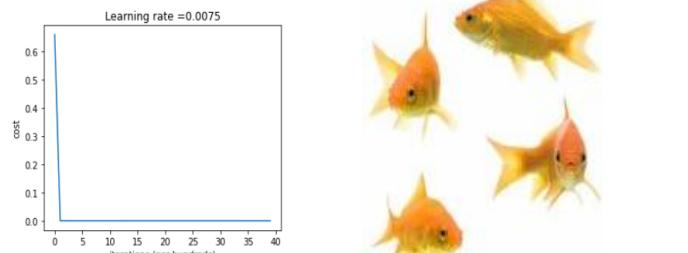
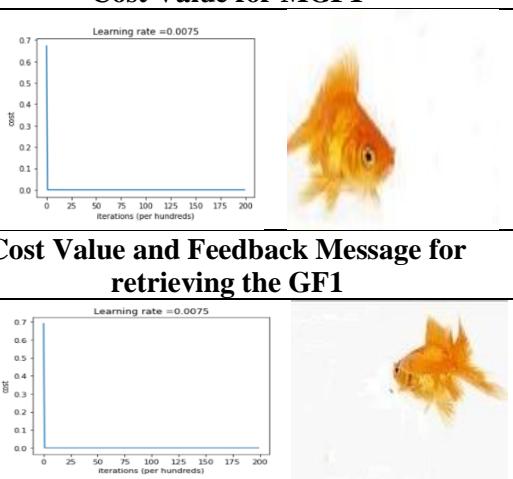
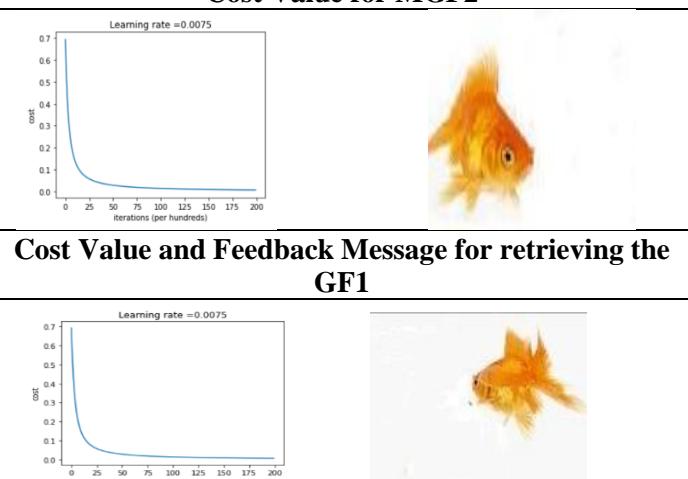
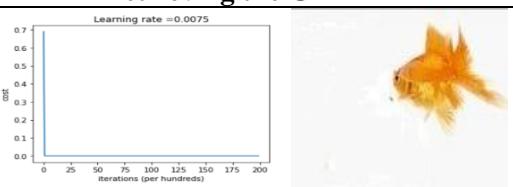
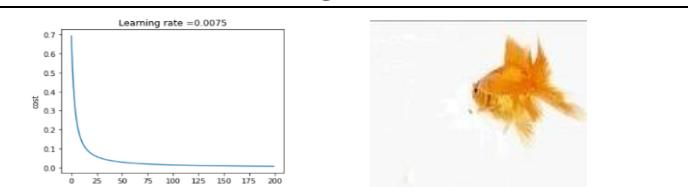
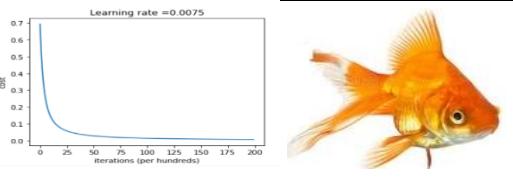
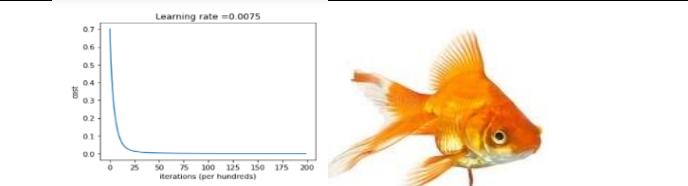
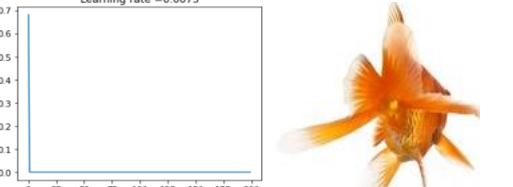
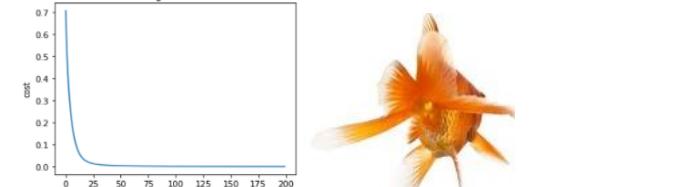
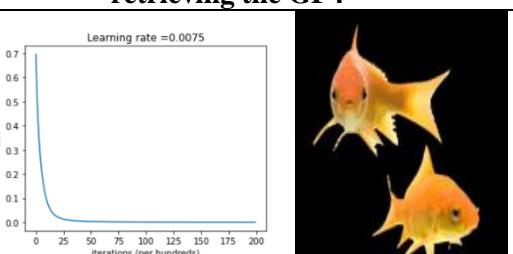
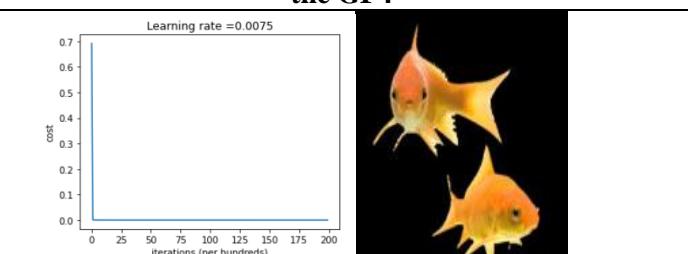
Image Name MP1	Cost after Iteration 0 0.674709	Cost after Iteration 19900 0.000001	Binary Features Matching	Accuracy	Expected Output	Predicted Output
P1	0.681986	0.000002	111	1.0	1	1.0
P2	0.680690	0.000002	111	1.0	1	1.0
P3	0.710151	0.000370	000	0.0	0	0.0
P4	0.709876	0.000370	000	0.0	0	0.0
P5	0.713068	0.000370	000	0.0	0	0.0
P6	0.701189	0.000371	100	1.0	1	0.0
P7	0.702619	0.000371	100	1.0	1	0.0
P8	0.694675	0.000371	100	1.0	1	0.0
P9	0.703492	0.000371	100	1.0	1	0.0
P10	0.697924	0.000371	100	1.0	1	0.0
P11	0.701175	0.000371	100	1.0	1	0.0
P12	0.708380	0.000370	100	1.0	1	0.0

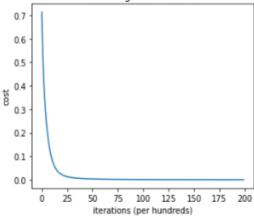
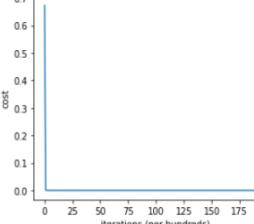
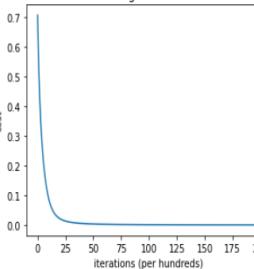
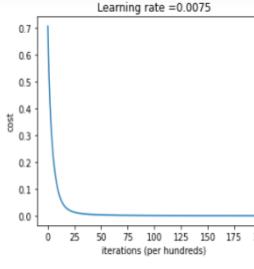
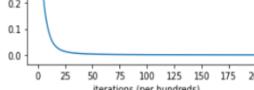
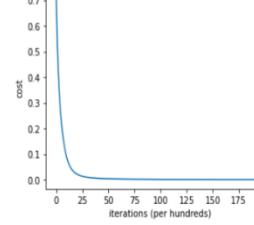
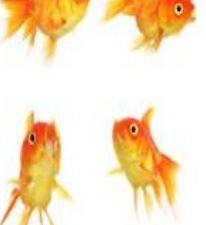
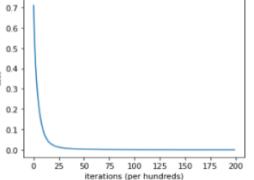
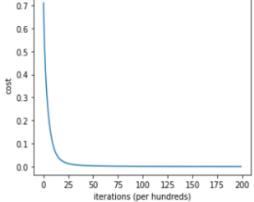
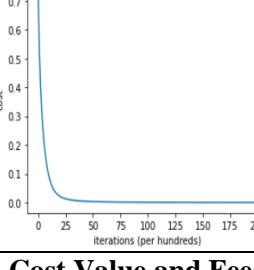
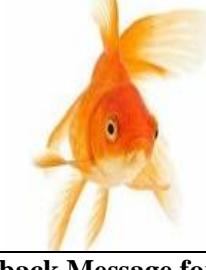
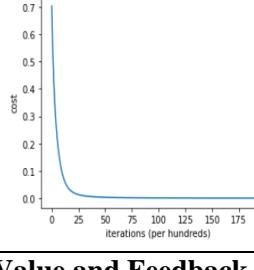
Table (5) shows the matching test for the image in figure (15-d)

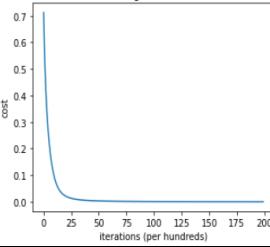
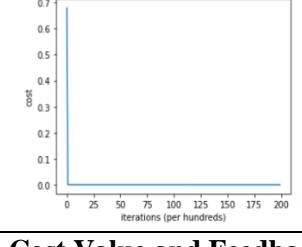
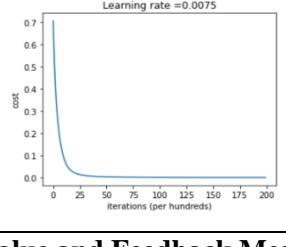
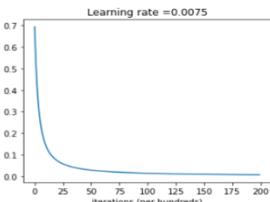
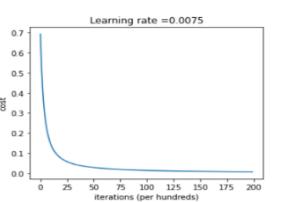
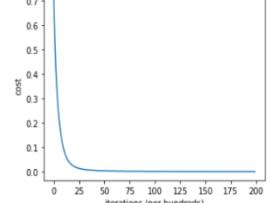
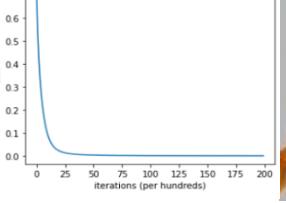
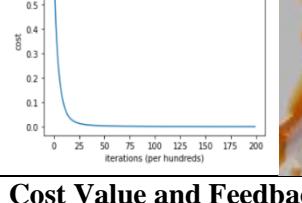
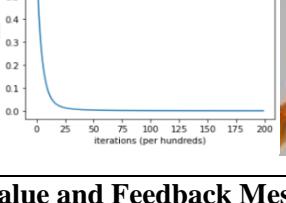
Table 5: Binary Mapping of Features' Fusion Tester for Highlighters

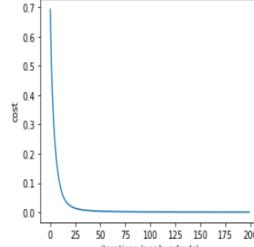
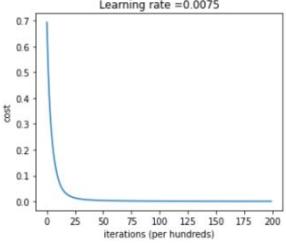
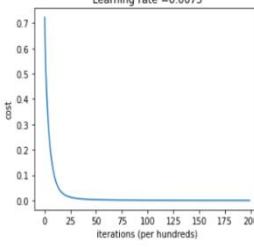
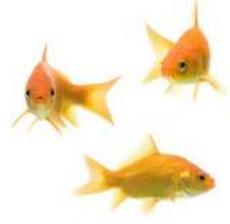
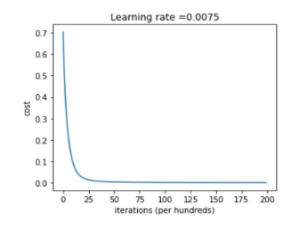
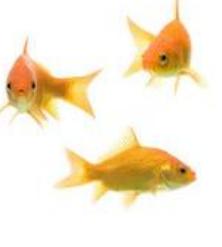
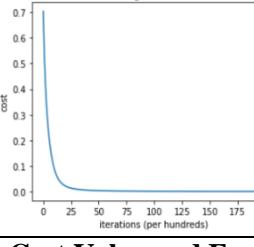
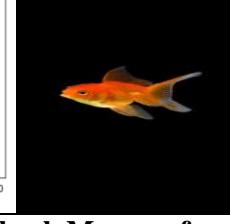
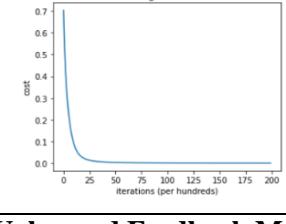
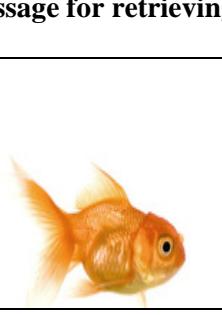
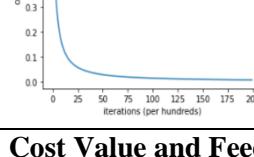
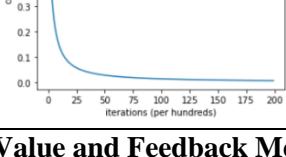
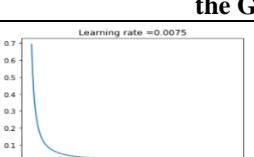
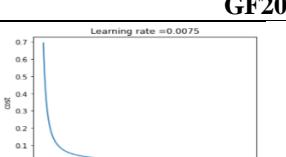
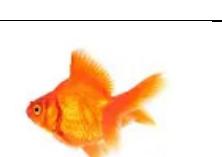
Image Name MP2	Cost after Iteration 0 0.672004	Cost after Iteration 19900 0.000001	Binary Features Matching	Accuracy	Expected Output	Predicted Output
P1	0.704434	0.000371	000	1.0	1	0.0
P2	0.795761	0.000371	100	1.0	1	0.0
P3	0.681986	0.000002	111	1.0	1	1.0
P4	0.676694	0.000002	111	1.0	1	1.0
P5	0.713068	0.000370	100	0.0	0	0.0
P6	0.685169	0.000002	111	1.0	1	1.0
P7	0.672004	0.000002	111	1.0	1	1.0
P8	0.691621	0.000001	111	1.0	1	1.0

P9	0.682909	0.000001	111	1.0	1	1.0
P10	0.688393	0.000001	111	1.0	1	1.0
P11	0.685183	0.000001	111	1.0	1	1.0
P12	0.708380	0.000370	000	1.0	0	0.0

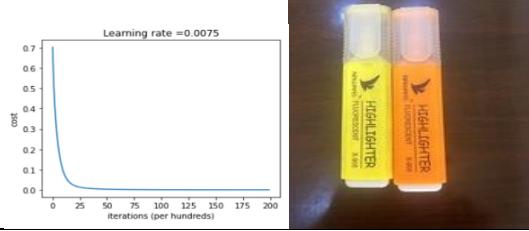
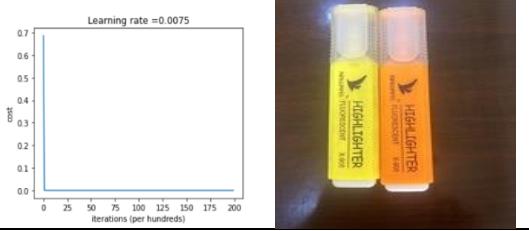
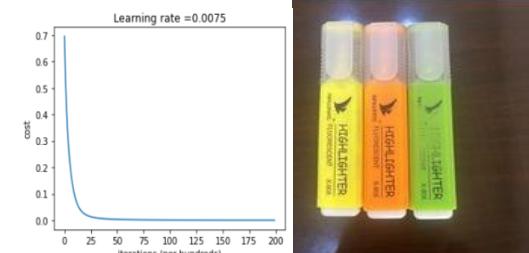
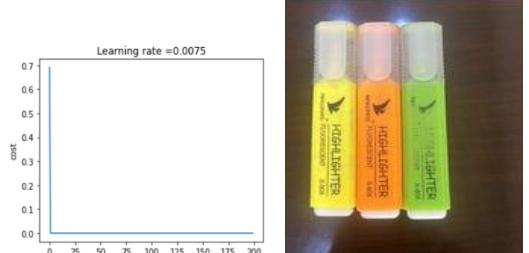
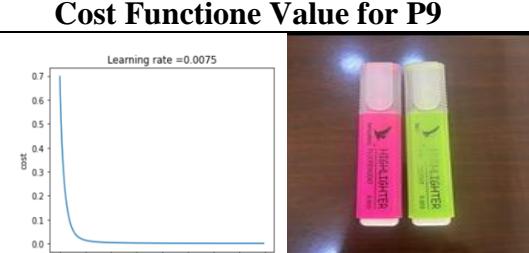
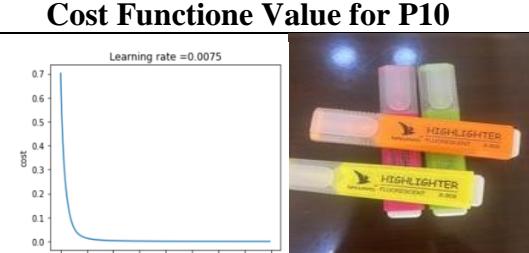
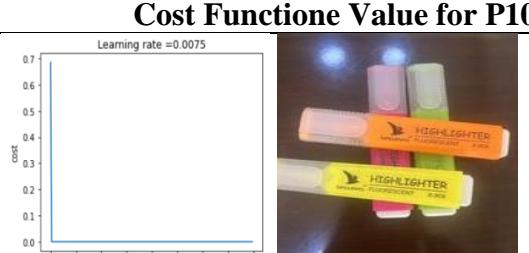
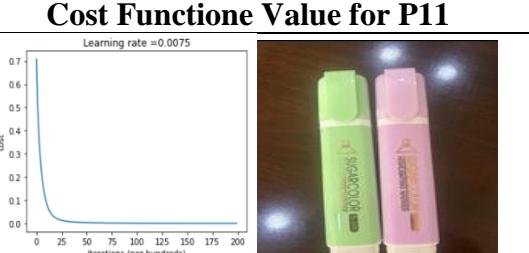
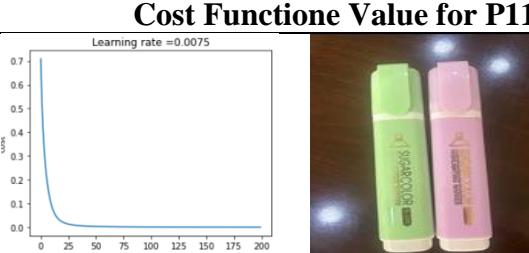
	
Cost Value for MGF1	Cost Value for MGF2
	
Cost Value and Feedback Message for retrieving the GF1	Cost Value and Feedback Message for retrieving the GF1
	
Cost Value and Feedback Message for retrieving the GF2	Cost Value and Feedback Message for retrieving the GF2
	
Cost Value and Feedback Message for retrieving the GF3	Cost Value and Feedback Message for retrieving the GF3
	
Cost Value and Feedback Message for retrieving the GF4	Cost Value and Feedback Message for retrieving the GF4
	
Cost Value and Feedback Message for retrieving the GF5	Cost Value and Feedback Message for retrieving the GF5

 	 
Cost Value and Feedback Message for retrieving the GF6	Cost Value and Feedback Message for retrieving the GF6
 	 
Cost Value and Feedback Message for retrieving the GF7	Cost Value and Feedback Message for retrieving the GF7
 	 
Cost Value and Feedback Message for retrieving the GF8	Cost Value and Feedback Message for retrieving the GF8
 	 
Cost Value and Feedback Message for retrieving the GF9	Cost Value and Feedback Message for retrieving the GF9
 	 
Cost Value and Feedback Message for retrieving the GF10	Cost Value and Feedback Message for retrieving the GF10

 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>
<p>Cost Value and Feedback Message for retrieving the GF11</p>	<p>Cost Value and Feedback Message for retrieving the GF11</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>
<p>Cost Value and Feedback Message for retrieving the GF12</p>	<p>Cost Value and Feedback Message for retrieving the GF12</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>
<p>Cost Value and Feedback Message for retrieving the GF13</p>	<p>Cost Value and Feedback Message for retrieving the GF13</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>
<p>Cost Value and Feedback Message for retrieving the GF14</p>	<p>Cost Value and Feedback Message for retrieving the GF14</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p>
<p>Cost Value and Feedback Message for retrieving the GF15</p>	<p>Cost Value and Feedback Message for retrieving the GF15</p>

 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 
<p>Cost Value and Feedback Message for retrieving the GF16</p>	<p>Cost Value and Feedback Message for retrieving the GF16</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 
<p>Cost Value and Feedback Message for retrieving the GF17</p>	<p>Cost Value and Feedback Message for retrieving the GF17</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 
<p>Cost Value and Feedback Message for retrieving the GF18</p>	<p>Cost Value and Feedback Message for retrieving the GF18</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 
<p>Cost Value and Feedback Message for retrieving the GF19</p>	<p>Cost Value and Feedback Message for retrieving the GF19</p>
 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 	 <p>Learning rate = 0.0075</p> <p>cost</p> <p>iterations (per hundreds)</p> 
<p>Cost Value and Feedback Message for retrieving the GF20</p>	<p>Cost Value and Feedback Message for retrieving the GF20</p>

Cost Functione Value for MP1	Cost Functione Value for MP2	
Cost Functione Value for P1	Cost Functione Value for P1	
Cost Functione Value for P2	Cost Functione Value for P2	
Cost Functione Value for P3	Cost Functione Value for P3	
Cost Functione Value for P4	Cost Functione Value for P4	
Cost Functione Value for P5	Cost Functione Value for P5	
Cost Functione Value for P6	Cost Functione Value for P6	

	
Cost Functione Value for P7	Cost Functione Value for P7
	
Cost Functione Value for P8	Cost Functione Value for P8
	
Cost Functione Value for P9	Cost Functione Value for P9
	
Cost Functione Value for P10	Cost Functione Value for P10
	
Cost Functione Value for P11	Cost Functione Value for P11
	
Cost Functione Value for P12	Cost Functione Value for P12