

Batch	Agent1	Agent2
1	7.7	8.5
2	9.2	9.6
3	6.8	6.4
4	9.5	9.8
5	8.7	9.3
6	6.9	7.6
7	7.5	8.2
8	7.1	7.7
9	8.7	9.4
10	9.4	8.9
11	9.4	9.7
12	8.1	9.1

t-Test: Paired Two Sample for Means

	Variable 1	Variable 2
Mean	8.25	8.683333333
Variance	1.059090909	1.077878788
Observations	12	12
Pearson Correlation	0.901055812	
Hypothesized Mean Difference	0	
df	11	
t Stat	-3.263938591	
P(T<=t) one-tail	0.003772997	
t Critical one-tail	1.795884819	
P(T<=t) two-tail	0.007545995	
t Critical two-tail	2.20098516	
Difference in Means	-0.433333333	

**There is a difference between Agent 1 and Agent 2, with Agent 1 consistently removing more impurities than Agent 2. The Pearson Correlation (0.901) indicates that the performance of both agents tends to vary similarly across batches. The Difference in Means (Agent 1 - Agent 2) is -0.433, indicating that Agent 1 leaves 0.433 parts per 1000 fewer impurities than Agent 2. The P-value for the two-tailed test is 0.0075, indicating a statistically significant difference between the two agents.**