

## Solution Target 3

### Explanation:

1. We merged together the scores and pre test scores

```
df_scores_pre_contest.head()
```

	Prutor ID	TOTAL	PreTestRate	PreTestCRate
0	101	59	3.0	4.0
1	102	17	2.0	3.0
2	103	25	4.0	4.0
3	104	30	3.0	4.0
4	105	5	3.0	3.0

2. We merged together the scores and post test scores

```
df_scores_post_contest.head()
```

	Prutor ID	TOTAL	PostTestRate	PostTestCRate
0	101	59	3	4
1	102	17	2	1
2	103	25	3	3
3	104	30	4	4
4	105	5	3	3

3. Then we got the pre-test and post-test scores in one place

	Prutor ID	PreTestRate	PreTestCRate	PostTestRate	PostTestCRate	TOTAL
0	101	3.0	4.0	3	4	59
1	102	2.0	3.0	2	1	17
2	103	4.0	4.0	3	3	25
3	104	3.0	4.0	4	4	30
4	105	3.0	3.0	3	3	5

4. Count of absolute difference of pre test and post test scores of overall test and in C programming reveal the changes in scores on average.
5. It is observed that **65 people out of 124** did not change their scores in overall rating and **57 people** did not change their scores in C programming
6. It is observed that **46 people out of 124** changed their scores by **1** in overall and **53 people** changed their scores by **1** in C programming
7. It is observed that **10 people out of 124** changed their scores by **2** in overall and **11 people** changed their scores by **2** in C programming
8. Also people who rated themselves more performed well in the contest