

# BCSE308P COMPUTER NETWORKS

## ASSIGNMENT

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### ERROR CONTROL

**HackerRank** NEW PREPARE CERTIFY COMPETE  rishaan

All Contests > ERROR\_CONTROL 1675316608

**ERROR\_CONTROL 1675316608** [Details ▶](#)

Challenges

**Current Rank: 1** [View your results](#)

**CRC**

Success Rate: **90.63%** Max Score: **20** Difficulty: **Medium**

[Try Again](#)

**CHECKSUM**

Success Rate: **80.00%** Max Score: **20** Difficulty: **Medium**

[Try Again](#)

**HAMMING\_DISTANCE**

Success Rate: **96.15%** Max Score: **20** Difficulty: **Medium**

[Try Again](#)


Contest ends in **3 days**

[Current Leaderboard](#)

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## 1. CRC

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# CRC

Problem

Submissions

Leaderboard

Discussions

Submitted 3 minutes ago • Score: 20.00 Status: Accepted

✓ Test Case #0

✓ Test Case #1


✓ Test Case #2

## Submitted Code

Language: Python 3 [Open in editor](#)

```
1 dd = input()
2 n, dv = len(dd), input()
3 dd += '0' * (len(dv) - 1)
4 m = k = len(dv)
5 res = dd[:m]
6 for i in range(len(dd) - m):
7     if res[0] == '1':
8         temp = dv
9     else:
10        temp = '0' * m
11    new_res = ''
12    for j in range(m):
13        if (res[j] != temp[j]):
14            new_res += '1'
15        else:
16            new_res += '0'
17    if k < n + m:
18        res = new_res[1:] + dd[k];
19    k += 1
20 dd = dd[:n] + res[1:];
21 print(dd)
22
```

## 2. CHECKSUM

**HackerRank** NEW PREPARE CERTIFY COMPETE Search 1  rishaan

All Contests > ERROR\_CONTROL 1675316608 > CHECKSUM

# CHECKSUM

Problem

Submissions

Leaderboard

Discussions

Submitted 11 hours ago • Score: 20.00 Status: Accepted

✓ Test Case #0

✓ Test Case #1



✓ Test Case #2

### Submitted Code

Language: Python 3 [Open in editor](#)

```
1 def add(a, b):
2     sum, carry = '', 0
3     for i in range(7, -1, -1):
4         t = int(a[i]) + int(b[i]) + carry
5         carry, r = t // 2, t % 2;
6         sum = str(r) + sum
7     return sum, carry
8 n = int(input())
9 a = [input() for i in range(n)]
10 sum = a[0]
11 for i in range(1, n):
12     sum, carry = add(sum, a[i])
13     if carry == 1:
14         sum, carry = add(sum, '00000001')
15 res = ''
16 for i in range(7, -1, -1):
17     if (sum[i] == '1'):
18         res = '0' + res
19     else:
20         res = '1' + res
21 print(res)
22
```

### 3. HAMMING DISTANCE

**HackerRank**  PREPARE <sup>NEW</sup> CERTIFY COMPETE Search Messages Notifications  rishaan

All Contests > ERROR\_CONTROL 1675316608 > HAMMING\_DISTANCE

## HAMMING\_DISTANCE

Problem Submissions Leaderboard Discussions

Submitted 11 hours ago • Score: 20.00 Status: Accepted

✓ Test Case #0

✓ Test Case #1

✓ Test Case #2

### Submitted Code

Language: Python 3 Open in editor

```
1 hd = 8
2 n = int(input())
3 a = [input() for i in range(n)]
4 for i in range(n):
5     for j in range(i + 1, n):
6         count = 0
7         for k in range(len(a[i])):
8             if (a[i][k] != a[j][k]):
9                 count += 1
10        if (count < hd):
11            hd = count
12 print(hd)
```