# CP IET SMP-2018

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COMPETITIVE PROGRAMMING



# ACKNOWLEDGEMENT

This is to thank NAVEEN and ABHISHEK who gave us such a wonderful and amazing summer mentorship

## **ABSTRACT**

The mentorship was really really good. It kept me engaged and helped me escape boredom through summer.

The mentors were very helpful and cleared doubt whenever it was there.

The questions in competitions were mindboggling and interesting at the same time.

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### PROBLEM DEFINITION

BEST LEARNING EXPERIENCE HATS OFF TO THE MENTORS

## OVERVIEW

WE HAD AT LEAST ONE SESSION A WEEK.
SESSION WAS ALWAYS ON TIME AND NEVER
LATE.

THERE WAS ALWAYS SOMETHING NEW IN THE SESSIONS.

AFTER EACH SESSION WE WERE GIVEN ASSIGNEMNTS WHICH CONTAINED SOME REALLY GOOD QUESTIONS.

# codes

#### **ASSIGNMENT 1:**

Q1: https://www.codechef.com/problems/C00K0FF

Code: <a href="https://www.codechef.com/viewsolution/18539528">https://www.codechef.com/viewsolution/18539528</a>

Q2: https://www.codechef.com/problems/GAMSTICK

Code: https://www.codechef.com/viewsolution/18621265

#### **ASSIGNMENT 2:**

Q1: <a href="https://www.hackerrank.com/contests/university-codesprint-3/challenges/bobs-game">https://www.hackerrank.com/contests/university-codesprint-3/challenges/bobs-game</a>

Code: <a href="https://www.hackerrank.com/contests/university-codesprint-3/challenges/bobs-">https://www.hackerrank.com/contests/university-codesprint-3/challenges/bobs-</a>

game/submissions/code/1309023629

#### **ASSIGNMENT 3:**

Q1: <a href="http://codeforces.com/problemset/problem/983/A#">http://codeforces.com/problemset/problem/983/A#</a>

CODE: http://codeforces.com/contest/983/submission/38484714

Q2: <a href="http://codeforces.com/problemset/problem/687/B">http://codeforces.com/problemset/problem/687/B</a>

CODE: <a href="http://codeforces.com/contest/687/submission/38678654">http://codeforces.com/contest/687/submission/38678654</a>

Q3: <a href="http://codeforces.com/problemset/problem/75/C">http://codeforces.com/problemset/problem/75/C</a>

CODE: <a href="http://codeforces.com/contest/75/submission/38439823">http://codeforces.com/contest/75/submission/38439823</a>

#### **ASSIGNMENT 4:**

Q1: https://www.codechef.com/JULY17/problems/IPCTRAIN

CODE: https://www.codechef.com/viewsolution/18890920

Q2: miscellaneous

CODE: <a href="https://github.com/IET-NITK/CP-Summer-Mentorship-">https://github.com/IET-NITK/CP-Summer-Mentorship-</a>

2018/blob/master/assignments/17CO121 saharsh/assignment4/qn2.cpp

Q3: miscellaneous

CODE: <a href="https://github.com/IET-NITK/CP-Summer-Mentorship-">https://github.com/IET-NITK/CP-Summer-Mentorship-</a>

2018/blob/master/assignments/17CO121 saharsh/assignment4/qn3.cpp

#### **ASSIGNMENT 6:**

Q1: https://www.codechef.com/ALMOCK01/problems/CHEFD

CODE:

Q2: <a href="https://www.codechef.com/problems/ADDMUL">https://www.codechef.com/problems/ADDMUL</a>

CODE: <a href="https://www.codechef.com/viewsolution/19260523">https://www.codechef.com/viewsolution/19260523</a>

## **TESTS**

### CONTEST 1:

QUESTION1: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/pop-count/submissions/code/1307871202">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/pop-count/submissions/code/1307871202</a>

QUESTION2: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/odd-even-saga-1/submissions">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/odd-even-saga-1/submissions</a>

QUESTION3: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/summation-of-series/submissions/code/1307870980">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/summation-of-series/submissions/code/1307870980</a>

QUESTION4: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/van-helsing-snares-dracula-1/submissions/code/1307850881">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/van-helsing-snares-dracula-1/submissions/code/1307850881</a>

QUESTION5: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/shipment-of-toys/submissions/code/1307849235">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/shipment-of-toys/submissions/code/1307849235</a>

QUESTION6: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/good-knight/submissions/code/1307848770">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/good-knight/submissions/code/1307848770</a>

QUESTION7: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/fill-the-tank-1/submissions/code/1307871648">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/fill-the-tank-1/submissions/code/1307871648</a>

QUESTION8: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/playing-with-numbers-5/submissions/code/1307871210">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/playing-with-numbers-5/submissions/code/1307871210</a>

QUESTION9: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/calculate-the-power/submissions/code/1307853921">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/calculate-the-power/submissions/code/1307853921</a>

QUESTION10: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/golf-with-gray-code/submissions/code/1307871325">https://www.hackerrank.com/contests/cp-summer-mentorship-test-1/challenges/golf-with-gray-code/submissions/code/1307871325</a>

### CONTEST2:

QUESTION1: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-">https://www.hackerrank.com/contests/cp-summer-mentorship-test-</a>

2/challenges/munnivsbunny/submissions/code/1308738428

QUESTION2: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-2/challenges">https://www.hackerrank.com/contests/cp-summer-mentorship-test-2/challenges</a>

QUESTION3: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-test-2/challenges">https://www.hackerrank.com/contests/cp-summer-mentorship-test-2/challenges</a>

QUESTION4:

**QUESTION5:** 

QUESTION6: https://www.hackerrank.com/contests/cp-summer-mentorship-test-2/challenges

### **CONTEST 3:**

QUESTION1: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/lesser-primes/submissions/code/1308928558">https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/lesser-primes/submissions/code/1308928558</a>

QUESTION2: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/bunny-loves-u/submissions/code/1308928792">https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/bunny-loves-u/submissions/code/1308928792</a>

#### QUESTION3:

QUESTION4: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/make-the-arrays-same/submissions/code/1308929074">https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/make-the-arrays-same/submissions/code/1308929074</a>

QUESTION5: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/choice-of-seats/submissions/code/1308929110">https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/choice-of-seats/submissions/code/1308929110</a>

QUESTION6: <a href="https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/cyclic-array-problem/submissions/code/1308936404">https://www.hackerrank.com/contests/cp-summer-mentorship-final-contest/challenges/cyclic-array-problem/submissions/code/1308936404</a>

QUESTION7:

**QUESTION8:**