

AI at ACM  
AI-ACM SIG Tasks

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Branch : S3 CSE-AI (Batch A)

TASK

**Category 2**

- 1) Complete Introduction to Machine Learning course on Kaggle:  
Time taken: 6 hours max  
Link: <https://www.kaggle.com/learn/intro-to-machine-learning>
- 2) Hackerrank Contest:  
Time taken: 5 days max  
Link: [www.hackerrank.com/ai-sig-contest](http://www.hackerrank.com/ai-sig-contest)

HACKERRANK – TASK 2

**Problem – 1**

**COMPANY LOGO**

CODE:

```
import math
import os
import random
import re
import sys
from collections import Counter
if __name__ == '__main__':
    s = input()
    z = Counter(s)
    z = Counter(sorted(s)).most_common(3)
```

```
for x in z:  
    print(*x)
```

### OUTPUT:

Testcase 0 

**Congratulations, you passed the sample test case.**

Click the **Submit Code** button to run your code against all the test cases.

#### Input (stdin)

```
aabbbccde
```

#### Your Output (stdout)

```
b 3  
a 2  
c 2
```

#### Expected Output

```
b 3  
a 2  
c 2
```

## Company Logo

Problem

Submissions

Leaderboard

Discussions

Submitted 2 hours ago • Score: 10.00

Status: **Accepted**



Test Case #0



Test Case #1



Test Case #2



Test Case #3



Test Case #4



Test Case #5

## Problem- 2

### TIME DELTA

### CODE:

```
import math
import os
import random
import re
import sys
from datetime import datetime
# Complete the time_delta function below.
def time_delta(t1, t2):
    time_1 = datetime.strptime(t1, '%a %d %b %Y %H:%M:%S %z')
    time_2 = datetime.strptime(t2, '%a %d %b %Y %H:%M:%S %z')
    return str(int(abs(time_1-time_2).total_seconds()))
if __name__ == '__main__':
    fptr = open(os.environ['OUTPUT_PATH'], 'w')
    t = int(input())
    for t_itr in range(t):
        t1 = input()
        t2 = input()
        delta = time_delta(t1, t2)
        fptr.write(delta + '\n')
    fptr.close()
```

OUTPUT:

### Testcase 0

**Congratulations, you passed the sample test case.**

Click the **Submit Code** button to run your code against all the test cases.

#### Input (stdin)

```
2
Sun 10 May 2015 13:54:36 -0700
Sun 10 May 2015 13:54:36 -0000
Sat 02 May 2015 19:54:36 +0530
Fri 01 May 2015 13:54:36 -0000
```

#### Your Output (stdout)

```
25200
88200
```




#### Expected Output

```
25200
88200
```

## Time Delta

Problem	Submissions	Leaderboard	Discussions
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Submitted an hour ago • Score: 10.00 Status: Accepted

 Test Case #0	 Test Case #1	 Test Case #2
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## Problem – 3

### NO IDEA!

#### CODE:

```
n,m = list(map(int,input().split()))
elements_array = list(map(int,input().split()))
A = set(map(int,input().split()))
B = set(map(int,input().split()))
happiness = 0
for i in elements_array:
    if i in A:
```

```
happiness += 1
if i in B:
    happiness -= 1
print(happiness)
```

### OUTPUT:

Testcase 0 

**Congratulations, you passed the sample test case.**

Click the **Submit Code** button to run your code against all the test cases.

**Input (stdin)**

```
3 2
1 5 3
3 1
5 7
```

**Your Output (stdout)**

```
1
```

**Expected Output**

```
1
```

**No Idea!**

Problem

Submissions

Leaderboard

Discussions

Submitted an hour ago • Score: 10.00


Status: Accepted

### **Problem 4:** **TRIANGLE QUEST 2**

CODE:

```
for i in range(1,int(input())+1):
    print (((10 ** i)//9)**2)
```

OUTPUT:

Testcase 0 

**Congratulations, you passed the sample test case.**

Click the **Submit Code** button to run your code against all the test cases.

**Score: 0**

**Input (stdin)**

```
5
```

**Your Output (stdout)**

```
1
121
12321
1234321
123454321
```

**Expected Output**

```
1
121
12321
1234321
123454321
```

**Compiler Message**

```
Success
```

## Triangle Quest 2

Problem

Submissions

Leaderboard

Discussions

Submitted an hour ago • Score: 10.00

Status: **Accepted**



Test Case #0



Success 0.03s



Test Case #2



Test Case #3



Test Case #4



Test Case #5

### Problem 5:

### VALIDATING CREDIT CARD NUMBERS

CODE:


```
import re
```

```

for i in range (int(input())):
    N = input()
    t = re.search(r"^[456]\d{15}$|^[456]\d{3}-\d{4}-\d{4}-\d{4}$",N)
    if(t):
        if(re.search(r"(\d)\1{3,}|(\d)\2{1}-(\d)\2{1}|-(\d)\4{3}-",N)):
            print("Invalid")
        else:
            print("Valid")
    else:
        print("Invalid")

```

### OUTPUT:

Testcase 0 

**Congratulations, you passed the sample test case.**

Click the **Submit Code** button to run your code against all the test cases.

#### Input (stdin)

```

6
4123456789123456
5123-4567-8912-3456
61234-567-8912-3456
4123356789123456
5133-3367-8912-3456
5123 - 3567 - 8912 - 3456

```

#### Your Output (stdout)

```

Valid
Valid
Invalid
Valid
Invalid
Invalid

```

## Expected Output

```
Valid
Valid
Invalid
Valid
Invalid
Invalid
```

## Validating Credit Card Numbers

Problem	Submissions	Leaderboard	Discussions
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Submitted 34 minutes ago • Score: 10.00

Status: **Accepted**

✓	Test Case #0	✓	Test Case #1	✓	Test Case #2
✓	Test Case #3	✓	Test Case #4	✓	Test Case #5

## AI SIG CONTEST [Details ▶](#)

### Challenges



- ✓ Company Logo

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Try Again
- ✓ Time Delta

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Try Again
- ✓ No Ideal

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Try Again
- ✓ Triangle Quest 2

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Try Again
- ✓ Validating Credit Card Numbers

Success Rate: 75.00% Max Score: 10 Difficulty: Medium

Try Again