

# IN-Class: Programming with LLMs

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Github Link: <https://github.com/wh0th3h3llam1/cmpe-272>

ChatGPT Link: <https://chatgpt.com/share/67a19a57-1a7c-800a-a0ba-9c19eef5c07f>

ChatGPT Prompt:

```
4,3,Mon May 11 03:17:40 UTC 2009,kindle2,tpryan,"@stellargirl I loooooooooovvvvvveee
my Kindle2. Not that the DX is cool, but the 2 is fantastic in its own right."
4,4,Mon May 11 03:18:03 UTC 2009,kindle2,vcu451,Reading my kindle2... Love it...
Lee child's is good read.
4,5,Mon May 11 03:18:54 UTC 2009,kindle2,chadfu,"Ok,
first assesment of the #kindle2 ...it fucking rocks!!!"
4,6,Mon May 11 03:19:04
UTC 2009,kindle2,SIX15,@kenburbary You'll love your Kindle2. I've had mine for a
few months and never looked back. The new big one is huge! No need for remorse! :)
4,7,Mon May 11 03:21:41 UTC 2009,kindle2,yamarama,@mikefish Fair enough. But i
have the Kindle2 and I think it's perfect :)
4,8,Mon May 11 03:22:00 UTC
2009,kindle2,GeorgeVHulme,@richardebaker no. it is too big. I'm quite happy with
the Kindle2.
0,9,Mon May 11 03:22:30 UTC 2009,aig,Seth937,Fuck this economy. I
hate aig and their non loan given asses.
4,10,Mon May 11 03:26:10 UTC
2009,jquery,dcostalis,Jquery is my new best friend.
```

This is my input csv file with thousands of data. I want to do sentiment analysis on this using textblob and Outputs a message about the sentiment of the text string, whether it's "Positive", "Negative" or "Neutral".

	A	B	C	D	E	F	G	H
1	Text	Sentiment						
2	@stellargirl I loooooooooovvvvvveee my Kindle2. Not that the DX is cool, but the 2 is fantastic in its own right.	Positive						
3	Reading my kindle2... Love it... Lee child's is good read.	Positive						
4	Ok, first assesment of the #kindle2 ...it fucking rocks!!!	Negative						
5	@kenburbary You'll love your Kindle2. I've had mine for a few months and never looked back. The new big one is huge! No need for remorse! :)	Positive						
6	@mikefish Fair enough. But i have the Kindle2 and I think it's perfect :)	Positive						
7	@richardebaker no. it is too big. I'm quite happy with the Kindle2.	Positive						
8	Fuck this economy. I hate aig and their non loan given asses.	Negative						
9	Jquery is my new best friend.	Positive						
10	Loves twitter	Neutral						
11	how can you not love Obama? he makes jokes about himself.	Negative						
12	Check this video out -- President Obama at the White House Correspondents' Dinner http://bit.ly/IMXUM	Neutral						
13	@Karoli I firmly believe that Obama/Pelosi have ZERO desire to be civil. It's a charade and a slogan, but they want to destroy conservatism	Negative						
14	House Correspondents dinner was last night whoopi, barbara & sherri went, Obama got a standing ovation	Neutral						
15	Watchin Espn...Jus seen this new Nike Commerical with a Puppet LeBron...sh*t was hilarious...LMAO!!!	Positive						
16	dear nike, stop with the flywire, that shit is a waste of science. and ugly. love, @vincentx24x	Negative						
17	#lebron best athlete of our generation, if not all time (basketball related) I don't want to get into inter-sport debates about _1/2	Positive						
18	I was talking to this guy last night and he was telling me that he is a die hard Spurs fan. He also told me that he hates LeBron James.	Negative						
19	i love lebron, http://bit.ly/PdHUr	Positive						
20	@ludajoice LeBron is a Beast, but I'm still cheering 4 the A..til the end.	Neutral						
21	@Pmillzz lebron IS THE BOSS	Neutral						
22	@sketchbug LeBron is a hometown hero to me, lol I love the Lakers but let's go Cavs, lol	Positive						
23	lebron and zydrunas are such an awesome duo	Positive						
24	@wordwhizkid LeBron is a beast... nobody in the NBA comes even close.	Neutral						
25	downloading apps for my iphone! So much fun :-)) There literally is an app for just about anything.	Positive						
26	good news, just had a call from the Visa office, saying everything is fine.....what a relief! I am sick of scams out there! Stealing!	Negative						
27	http://twurl.nl/epkr4b - awesome come back from @biz (via @fredwilson)	Positive						
28	In montreal for a long weekend of R&R. Much needed.	Positive						
29	Booz Allen Hamilton has a bad ass homegrown social collaboration platform. Way cool! #ttiv	Negative						
30	[#MLUC09] Customer Innovation Award Winner: Booz Allen Hamilton -- http://ping.fm/czhPP	Neutral						
31	@SoChi2 I current use the Nikon D90 and love it, but not as much as the Canon 40D/50D. I chose the D90 for the video feature. My mistake.	Positive						
32	need suggestions for a good IR filter for my canon 40D ... got some? pls DM	Positive						
33	@surft: I just checked my google for my business- blip shows up as the second entry! Huh. is that a good or ba... ? http://blip.fm/~6emhv	Positive						
34	@phyreman9 Google is always a good place to look. Should've mentioned I worked on the Mustang w/ my Dad, @KimbleT.	Positive						

# HackerRank Coding Problems using LLM

**Language:** Python

## HackerRank Easy Question

ChatGPT Prompt: <https://chatgpt.com/share/67a19a57-1a7c-800a-a0ba-9c19eef5c07f>

**HackerRank** | Prepare | Python | Strings | String Split and Join | Exit Full Screen View

**Problem**

In Python, a string can be split on a delimiter.

**Example:**

```
>>> a = "this is a string"
>>> a = a.split(" ") # a is converted to a list of strings.
>>> print a
['this', 'is', 'a', 'string']
```

Joining a string is simple:

```
>>> a = "-".join(a)
>>> print a
this-is-a-string
```

**Task**

You are given a string. Split the string on a " " (space) delimiter and join using a - hyphen.

**Function Description**

Complete the `split_and_join` function in the editor below.

`split_and_join` has the following parameters:

- string `line`: a string of space-separated words

**Returns**

- string: the resulting string

**Input Format**

The one line contains a string consisting of space separated words.

**Sample Input**

```
this is a string
```

**Congratulations**

You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#) [Next Challenge](#)

**Test case 0** **Success**

Compiler Message

Input (stdin)

```
1 this is a string
```

[Download](#)

Expected Output

```
1 this-is-a-string
```

[Download](#)

```
def split_and_join(line):
    return "-".join(line.split())

# Taking user input
user_input = input()
print(split_and_join(user_input))
```

## HackerRank Medium

ChatGPT Prompt: <https://chatgpt.com/share/67a19a57-1a7c-800a-a0ba-9c19eef5c07f>

## Before

**HackerRank** | Prepare | Python | Itertools | Compress the String! | Exit Full Screen View

**Problem**  
In this task, we would like for you to appreciate the usefulness of the `groupby()` function of `itertools`. To read more about this function, [Check this out](#).

You are given a string `S`. Suppose a character '`c`' occurs consecutively `X` times in the string. Replace these consecutive occurrences of the character '`c`' with '`(X, c)`' in the string.

For a better understanding of the problem, check the explanation.

**Input Format**  
A single line of input consisting of the string `S`.

**Output Format**  
A single line of output consisting of the modified string.

**Constraints**  
All the characters of `S` denote integers between 0 and 9.  
 $1 \leq |S| \leq 10^4$

**Sample Input**  
1222311

**Sample Output**  
(1, 1) (3, 2) (1, 3) (2, 1)

**Explanation**  
First, the character 1 occurs only once. It is replaced by (1, 1). Then the character 2 occurs three times, and it is replaced by (3, 2) and so on.

Also, note the single space within each compression and between the compressions.

13/13 test cases failed :(

Ask your friends for help: [f](#) [t](#) [in](#)

× **Test case 0** Compiler Message  
× **Test case 1** Wrong Answer  
× **Test case 2** Input (stdin)  
× **Test case 3** Expected Output  
× **Test case 4** (1, 1) (3, 2) (1, 3) (2, 1)  
× **Test case 5**  
× **Test case 6**

Line: 25 Col: 24

Upload Code as File | Test against custom input | Run Code | Submit Code

## After

**HackerRank** | Prepare | Python | Itertools | Compress the String! | Exit Full Screen View

**Problem**  
In this task, we would like for you to appreciate the usefulness of the `groupby()` function of `itertools`. To read more about this function, [Check this out](#).

You are given a string `S`. Suppose a character '`c`' occurs consecutively `X` times in the string. Replace these consecutive occurrences of the character '`c`' with '`(X, c)`' in the string.

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**Sample Input**  
1222311

**Sample Output**  
(1, 1) (3, 2) (1, 3) (2, 1)

**Explanation**  
First, the character 1 occurs only once. It is replaced by (1, 1). Then the character 2 occurs three times, and it is replaced by (3, 2) and so on.

Also, note the single space within each compression and between the compressions.

You have earned 20.00 points!  
You are now 15 points away from the 1st star for your python badge. 57% 20/35

**Congratulations**  
You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#) [Next Challenge](#)

✓ **Test case 0** Compiler Message  
✓ **Test case 1** Success  
✓ **Test case 2** Input (stdin)  
✓ **Test case 3** Expected Output  
✓ **Test case 4**

Line: 25 Col: 1

Upload Code as File | Test against custom input | Run Code | Submit Code

```
def modify_string(S):
    result = []
    i = 0
    n = len(S)

    while i < n:
        count = 1

        # Count the consecutive occurrences of the current character
        while i + 1 < n and S[i] == S[i + 1]:
            count += 1
            i += 1
```

```

# Append the result in the (X,c) format
result.append(f"({count}, {S[i]})")
i += 1

# Join the result with spaces and return
return " ".join(result)

# Input string
S = input().strip()
# Get the modified string and print the result
print(modify_string(S))

```

## HackerRank Hard Question

ChatGPT Prompt: <https://chatgpt.com/share/67a19a57-1a7c-800a-a0ba-9c19eef5c07f>

The screenshot shows the HackerRank challenge page for 'Validating Postal Codes'. The problem description states that the goal is to find alternating repetitive digit pairs in a given string. Two regular expressions are provided: one to check if the input string  $P$  is a valid postal code using the following expression:

```
(bool(re.match(regex_integer_in_range, P))
and len(re.findall(regex_alternating_repetitive_digit_pair, P)) < 2)
```

The input format is a single string denoting  $P$  from stdin. The output format is to print anything to stdout. The sample input is 110000 and the sample output is False. The explanation states that 110000 is invalid because it contains two alternating digit pairs (0,0) and (0,0).

The right side of the page shows a congratulations message: 'You have earned 80.00 points! You are now 145 points away from the gold level for your python badge.' It also shows a progress bar at 19% (255/400) and a 'Next Challenge' button. Below this, there is a table of test cases:

Test case	Input (stdin)	Expected Output
Test case 0	110000	False
Test case 1		
Test case 2		
Test case 3		
Test case 4		
Test case 5		

```

import re

regex_integer_in_range = (
    r"^[1-9][0-9]{5}$" # Ensures a 6-digit number in the range 100000-999999
)
regex_alternating_repetitive_digit_pair = (
    r"(\d)(?=\d\1)" # Detects alternating repetitive digit pairs
)

P = input()
print(
    bool(re.match(regex_integer_in_range, P))
    and len(re.findall(regex_alternating_repetitive_digit_pair, P)) < 2
)

```

```
)
```