Name of Examination	CAT2, FALL **2021-22 Semester**			
Slot: L45+L46				
Course Code:	CSE3002	Course Title:	Internet and Web Programming	
Emp. No.:	11579	Faculty Name:	Dr. A. Mary Mekala	School: SITE

1.	Write a Jquery that takes input from text fields. On button click it check if one is the recursive acronym of other. Slide down the output stating that "It is a Recursive Acronym" otherwise display as "Not a Recursive Acronym". Example1: Input: T1- VISA T2 – VISA International Service Association Output It is a Recursive Acronym Example2: Input T1- OIL T2- OIL India Output Not an Acronym
2.	Write a javascript code that takes an array of words as input and check whether the sequence "er" occurs as part of any element. If so delete those words from the array, and convert the remaining words to uppercase and display it in when a tab key is pressed from the text box. Example Input String: [alter, maze, striker, ladder, kernel, gem] Output: [MAZE, GEM]
3	Write a javascript code to check if the number entered in text field is half prime and half non-prime and display the output in a para. **Case:1** Input : 12364 <table><tr><td>Index</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>digit</td><td>1</td><td>2</td><td>3</td><td>6</td><td>4</td></tr></table> Total no. of digits in the input is 5 So 5/2 = 2, digits at 0, 1, 2 – prime, digits at 3 , 4 non-prime Output The number is half prime and half non-prime

Case:2

Input : 694875

Index	0	1	2	3	4	5
digit	6	9	4	8	7	5

Total no. of digits in the input is 6

So 6/2 = 3, digits at 0, 1, 2 ,3– non prime , digits at 4 , 5 prime

Output

The number is half prime and half non prime

4 A top secret message containing letters from A-Z is being encoded to numbers using the following mapping:

'A' -> 1
'B' -> 2
...
'Z' -> 26

You are an FBI agent. You have to determine the total number of ways that message can be decoded.
Note: An empty digit sequence is considered to have one decoding. It may be assumed that the input contains valid digits from 0 to 9 and If there are leading 0's, extra trailing 0's and two or more consecutive 0's then it is an invalid string.

Sample I/O

Input : ABC

O/P

ABC

LC

AW

Three ways.

***Given encoded message "123", it could be decoded as "ABC" (1 2 3) or "LC" (12 3) or "AW"(1 23).
So total ways are 3.

Write a JQuery code that takes the input from the text field and finds the different decoding strings and displays the output on a textarea line by line. The textarea is in ,slideDown the

5 Write a Jquery code that reads the sentence from a textbox t1. On button click, Check whether each word in the sentence starts with a vowel and display the result on the div tag.
Example:
Input string1: Our aircraft is awesome.
Output: The vowels are O,A,I,A
Input string2: Our aircraft looks pretty.
Output: The sentence starts with consonants too.

6	Write a JQuery code that takes two names from text fields, the names can contain only alphabets and space. The alphabet at word boundary should be in uppercase and rest of the alphabets must be in lowercase. The validation of name should done before checking the similarity between. When checking of similarity, it should be case insensitive. **Calculation of similarity** Count the common characters and divide by the length of the longest name. The spaces should not be included in the count as well as length. Name 1: Nehaa Shree Kannan Name2: Anikaa Pon Shree Kannan [longest first name excluding spaces] The common characters = [a,a,n,s,h,r,e,e] The similarity index = 8 / 14 *100 The blue coloured text of Name1 is from the text field named fn1 and yellow coloured text of Name1 is from text field named ln1 The blue coloured text of Name2 is from the text field named fn2 and yellow coloured text of Name2 is from text field named ln2 **O/P** – Two people have same last name, they differ in their first name. The similarity index of their first name is 57% The message should be displayed on <h4> tag. Fade In the <h4>.
7	Write a Javascript code that takes two names from text fields, the names can contain only alphabets and no space. Flames Game is a relationship calculating algorithm famous between the youngsters. At the time of graduation everyone might heard about this and many of them tried out this secretly. Some took this as very serious also. So what FLAMES stance for? F – Friendship L – Love A - Affection M – Marriage E – Enemy S - Sister (Sibling) How we can calculate the FLAMES? Your name: asd Partner name: abcd **Steps:** 1. Get the flames count 2. Take the two names ('asd' and 'abcd') 3. Remove the common characters (two common characters 'a', 'd') 4. Get the count of the characters that are left (Removed a,d and the rest are s,b,c. So total 3.) Get the flames result We take FLAMES letters ('F', 'L', 'A', 'M', 'E', 'S')

And start removing letters using the flames count we got.

And the letter which last the process is the result.

In our example we got flames count = 3. So first we takes FLAMES.

FLAMES

Then we start count from left up to flames count 3. Then remove the letter which is in the position 3. In this case it is 'A'. So the letters become:

FLMES

Then we start count again from the letter which is removed ie, from 'M'. So the next character to remove is 'S'. So our letters become:

FLME

After next step:

FLE

Then:

FE

Last:

F

So the result is 'Friend'. The message should be displayed on <h4> tag.

8

Chinese animal sign (Shengxiao) follows the 12-year cycle defined by lunar calendar. Each year in the cycle is represented by one animal, and people's sign is determined by their birth year. The cycle repeats every 12 years with the order like this: Rat, Ox, Tiger, Rabbit, Dragon, Snake, Horse, Sheep, Monkey, Rooster, Dog and Pig. For example, 2018 is a Year of the Dog and 2019 is a Year of the Pig.

How to calculate the Chinese Zodia Sign mathematically?

0: Monkey	1: Rooster	2: Dog	3: Pig
4: Rat	5: Ox	6: Tiger	7: Rabbit
8: Dragon	9: Snake	10: Horse	11: Sheep

Take the great singer Celine Dion for example: She was born in 1968.
1968/12=164 (no remainder)
No remainder equals to 0, which indicates Monkey sign.
So she is in Monkey sign.

So the lucky numbers are 1,7,8 and the colors are whit, gold blue

Barack Obama was born in 1961.
1961/12=163 with remainder 5
5 corresponds to Ox, so Obama gets the Ox sign.

If you use an electronic math calculator, follow this way to get the remainder. Here we take the year of 1988 for example:
1988/12≈165.667, take the decimal 0.667
0.667*12≈8.004
Half adjust the result, get the integer 8 and the corresponding sign of Dragon.

Sign	Lucky
Ox	Lucky Numbers:1, 9 Lucky Colors: red, blue, purple

	Tiger	Lucky Numbers:1, 3, 4 Lucky Colors: grey, blue, white, orange
	Rabbit	Lucky Numbers:3, 4, 9 Lucky Colors: red, blue, pink, purple
	Dragon	Lucky Numbers:1, 6, 7 Lucky Colors: gold, silver, hoary
	Snake	Lucky Numbers:2, 8, 9 Lucky Colors:red, light yellow, black
	Horse	Lucky Numbers:2, 3, 7 Lucky Colors:brown, yellow, purple
	Sheep	Lucky Numbers:3, 4, 9 Lucky Colors: green, red, purple
	Monkey	Lucky Numbers:1, 7, 8 Lucky Colors:white, gold, blue
	Rooster	Lucky Numbers:5, 7, 8 Lucky Colors:gold, brown, yellow
	Dog	Lucky Numbers:3, 4, 9 Lucky Colors:green, red, purple
	Pig	Lucky Numbers:2, 5, 8 Lucky Colors:yellow, grey, brown, gold
	Rat	Lucky Numbers:2, 3 Lucky Colors:gold, blue, green

Write a Javascript code to implement the above and display the lucky number and lucky colors in tag

9 Write a javascript/jquery code that reads a single word from the user and check whether the first letter of the word starts with consonants. If so remove that character and append it at the end of the word and add “ay” along the word and if the input string starts with the vowels then add the last two characters of the word in the beginning.

Example:

Input1: Shampoo

Output: hampooSay

Input2: explain

Output:inexpla

10 Given an array of words, Write a Javascript/JQuery code that takes an english sentence as input , finds out if the English sentence can be segmented into a space-separated sequence of words given in the array and displays the output in <h4> in .The should slide down.

var arr = ["i", "like", "sam", "sung", "samsung", "mobile", "ice", "cream", "icecream", "man", "go", "mango"]

	Sample I/O Input: ilike Output: The string can be segmented as "i like". Input: ilikesamsung Output: The string can be segmented as "i like samsung" or "i like sam sung".

No	REGISTER NO	NAME	Q. No
1	18BCE0639	RAJAT TOMAR	1
2	18BCE2421	LINCOLN BARAL	2
3	18BCE2440	BADHAN PAUL	3
4	19BCB0027	PRATEEK DHAWAN	4
5	19BCB0071	HARSHIT ANAND	5
6	19BCB0117	MASETTY PREETHAM	6
7	19BCE0037	NISHTHA SINGH	7
8	19BCE0042	APOORVA CHAWDA	8
9	19BCE0072	SUNKARA RAVI TEJA	9
10	19BCE0140	GALI SAI VENKATA SREEKAR	10
11	19BCE0166	PARTH KEYUR SHAH	1
12	19BCE0204	V KARTIK	2
13	19BCE0265	AYUSH GUPTA	3
14	19BCE0289	HARSHIT SHRIVASTAVA	4
15	19BCE0306	NUTULAPATI SRIADITYA	5
16	19BCE0384	SAIMA SHAHNAWAZ	6
17	19BCE0392	SOURIS ASH	7
18	19BCE0399	VUTUKURI PRANAI DIVAKAR	8
19	19BCE0416	TANMAY SRIVASTAVA	9
20	19BCE0422	GARVIT ARORA	10
21	19BCE0437	ADARSH MISHRA	1
22	19BCE0456	SAMAR ABBAS NAQVI	2

23	19BCE0493	TRINAV RATTAN	3
24	19BCE0496	HARSH VIVEK LONDHEKAR	4
25	19BCE0515	NISHANT RAJ	5
26	19BCE0572	PANKAJ SHARMA	6
27	19BCE0690	DEVJYOTI KARAN	7
28	19BCE0727	SAI CHAITANYA PENTAPATI	8
29	19BCE0736	TALHAR JANHAVI AJAY	9
30	19BCE0747	SHOBHIT GUPTA	10
31	19BCE0763	JAGIRDAR ROHIT	1
32	19BCE0775	NAMAN KHANDELWAL	2
33	19BCE0788	GAGAN CHORDIA	3
34	19BCE0812	AVISH AVIRAJ JHA	4
35	19BCE0898	REVANTH REDDY SHADA	5
36	19BCE0924	KSHITIEJ VERMA	6
37	19BCE0938	KASA YESHWANT	7
38	19BCE0957	VATSAL PODDAR	8
39	19BCE0960	ARGHO KONAR	9
40	19BCE0985	JIYA GARG	10
41	19BCE2006	SAXENA TANVI RAJEEV	1
42	19BCE2041	BUDDHI ROHAN SAI	2
43	19BCE2102	AYUSH ABRAHAM	3
44	19BCE2103	ANIKET SINGH	4
45	19BCE2123	SRINJAY SAHA	5
46	19BCE2146	TANMAY KUMAR	6
47	19BCE2155	CHINNAMSETTI VISHNU VARDHAN	7
48	19BCE2297	SUYASH	8
49	19BCE2305	AKSHITA KHALORIA	9
50	19BCE2354	BHOSALE JANHAVI VIJAYSINH	10
51	19BCE2383	SHAURYA SINGHAL	1
52	19BCE2409	SARAVANAN SANJANA	2

53	19BCE2440	RIA ARUN	3
54	19BCE2459	ESHA JAWAHARLAL SHAJAHAN	4
55	19BCE2486	MEDHA TRIPATHI	5
56	19BCE2516	SAMYAK JAIN	6
57	19BCE2623	AADITYA JHA	7
58	19BCI0015	GUNTURU PUSHWANTH	8
59	19BCI0045	KARE GANESH	9
60	19BCI0055	MAHI PAVAN KEERTHI	10
61	19BCI0124	KHYATI CHATURVEDI	1
62	19BCI0186	PARTH BADKUL	2
63	19BCI0213	FEBIN FRANCIS KAVALAKATT	3
64	19BCI0235	AAYUSH KUMAR	4
65	19BCI0268	MALIKA MALHOTRA	5