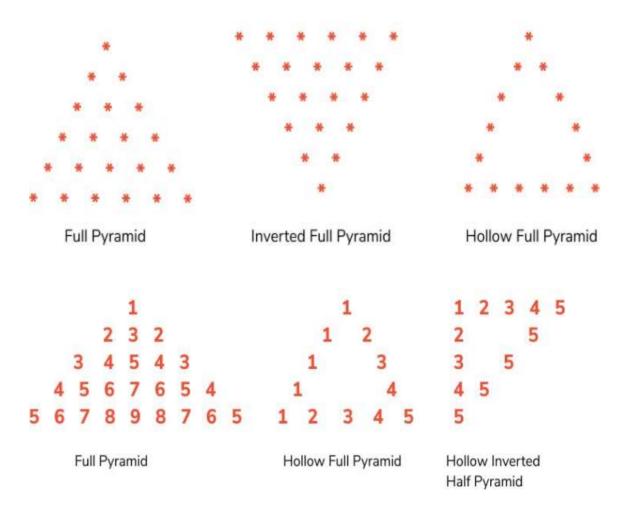
Core Java Date: 5/07/2024

- 1. Write a java program to check whether a number is Armstrong number or not.
- 2. Write a java program to print all Armstrong numbers between 1 to n.
- 3. Write a java program to check whether a number is Perfect number or not.
- 4. Write a java program to print all Perfect numbers between 1 to n.
- 5. Write a java program to check whether a number is Strong number or not.
- 6. Write a java program to find LCM of two numbers.
- 7. Write a java program to check whether a number is Prime number or not.
- 8. Write a java program to print all Prime numbers between 1 to n.
- 9. Write a java program to find sum of all prime numbers between 1 to n.
- 10. Write a java program to find all prime factors of a number.



Array Program

332211

1) Write a program in java to merge two arrays of same size sorted in decending order.

Test Data: Input the number of elements to be stored in the first array:3 Input 3 elements in the array: element - 0:1 element - 1:2 element - 2:3
Input the number of elements to be stored in the second array :3 Input 3 elements in the array :
element - 0:1
element - 1:2
element - 2:3
Expected Output :
The merged array in decending order is :

2) Write a program in java to separate odd and even integers in separate

arrays?

Test Data:

Input the number of elements to be stored in the array :5

Input 5 elements in the array:

element - 0 : 25 element - 1 : 47

element - 2 : 42

element - 3 : 56

element - 4 : 32 Expected Output :

The Even elements are:

42 56 32

The Odd elements are:

25 47

3) Write a program in java to delete an element at desired position from an array.

Test Data:

Input the size of array: 5

Input 5 elements in the array in ascending order:

element - 0:1

element - 1:2

element - 2:3

element - 3:4

element - 4:5

Input the position where to delete: 3

Expected Output:

The new list is: 1245

4) Write a program in java to find the second largest element in an array?

Test Data:

Input the size of array: 5

Input 5 elements in the array:

element - 0:2

element - 1:9

element - 2:1

element - 3:4

element - 4:6

Expected Output:

The Second largest element in the array is: 6

5). Write a program in java to find a pair with given sum in the array.

Expected Output:

The given array: 684-579

The given sum: 15

Pair of elements can make the given sum by the value of index 0 and 5

1) Write a program in java to find the majority element of an array?

A majority element in an array A[] of size n is an element that appears more than n/2 times (and hence there is at most one such element).

Expected Output:

The given array is: 48467448

There are no Majority Elements in the given array.

2) Write a program in java to rotate an array by N positions?

Expected Output:

The given array is: 0 3 6 9 12 14 18 20 22 25 27

From 4th position the values of the array are: 12 14 18 20 22 25 27

Before 4th position the values of the array are: 0 3 6 9

After rotating from 4th position the array is:

12 14 18 20 22 25 27 0 3 6 9

3) Write a program in java to find the ceiling in a sorted array?

Given a sorted array in ascending order and a value x, the ceiling of x is the smallest element in array greater than or equal to x, and the floor is the greatest element smaller than or equal to x. Expected Output:

The given array is: 134789910

The ceiling of 5 is: 7

9) Write a program in java to find the Floor and Ceil of the number 0 to 10 from a sroted array.

Expected Output:

The given array is: 1 3 5 7 8 9

Number: 0 ceiling is: 1 floor is: -1

Number: 1 ceiling is: 1 floor is: 1

Number: 2 ceiling is: 3 floor is: 1

Number: 3 ceiling is: 3 floor is: 3

Number: 4 ceiling is: 5 floor is: 3

Number: 5 ceiling is: 5 floor is: 5

Number: 6 ceiling is: 7 floor is: 7

Number: 8 ceiling is: 8 floor is: 8

Number: 9 ceiling is: 9 floor is: 9 Number: 10 ceiling is: -1 floor is: 9

10) Write a program in java to find the smallest missing element from a sorted array?

Expected Output:

The given array is: 0 1 3 4 5 6 7 9 The missing smallest

element is: 2

Class and Object

Q1. Write a program to create class name as Cube with two methods

void setValue(int x): this function accept number as parameter

int getCube(): this function can calculate cube of number and return it.

Q2. Write program to create class name as Factorial with two functions

void setValue(int x): this function accept number as parameter

int getFactorial(): this function can calculate factorial of number and return it.

Q3. Write program to create class name as CheckChar with two functions

void setChar(char ch): this function accept single character as input

boolean checkChar(): this function can check character is alphabet or digit of special symbol if

character is alphabet or digit return true if character is digit then return false.

Q4. Write program to create class name as FindMax with two functions

void setArray(int a[]): this function is used for accept array as parameter

int getMax(): this function can find the max value from array and return it.

Q5. Write program to create class name as SortArr with two functions

void setArray(int a[]): this function can accept array as parameter

int [] getSortArray(): this function can perform sorting on array and return sorted array

Q6. Write program to create POJO class name as Employee with id,name and salary attribute and

store data in object and retrieve data from object

Q7. Write program to create class name as CheckDuck with parameterized constructor

CheckDuck(int no): this constructor can accept number as parameter

Boolean isDuckNumber(): this function check if number is duck return true otherwise return false.

Q8. Write program to create class name as Area with constructor overloading

Area(float radius): this function can accept radius as input and calculate circle Area

Area(int len,int width): this function can accept len and width as input and calculate area of

rectangle

Q9. Write program to create class name as MergeTwoArray with parameterized constructor

MergeTwoArray(int [],int []): this constructor accept two array as parameter int [] getMergeArray(): this function merge two array in third array and return new merged array Q10. Write program for write code for singleton class?

Q11. Write code for utility class?

Q12.Write program to create class name as FindMax with two functions void setArray(int a[]): this function is used for accept array as parameter int getMax(): this function can find the max value from array and return it.

Q13. Write program to create class name as SortArr with two functions void setArray(int a[]): this function can accept array as parameter int [] getSortArray(): this function can perform sorting on array and return sorted array

Q14. Write program to create class name as MergeTwoArray with two function

Void MergeTwoArray(int [],int []): this function accept two array as parameter

int [] getMergeArray(): this function merge two array in third array and return new merged array

Q15. Write Program create class name as ArrSum with method void setValue(int arr[]) you have to create child class name as GetSum with method int getArrSum() you have to accept array values from ArrSum and calculate its sum and return it

Q16. Write Program to perform method overriding you have to create class name as ArrParent with method void setValue(int arr[]): this method can accept array as parameter void arrangeSeq(): this method can display array as per user input sequence You have to create two child class name as ArrangeAscendingOrder and you have to inherit ArrParent class in it and override arrangeSeq()

method in ArrangeAscendingOrder and sort array and display in ascending order and you have to create one more class name ReverseArray and override arrangeSeq() method from ArrParent and reverse array and display it

Q17. Write program to create class name as Reverse with two functions void setArray(int a[]): this function can accept array as parameter int [] getSortArray(): this function can perform reverse on array and return sorted array

Q18. Write program to create class name as RemoveDuplicate with two functions void setArray(int a[]): this function can accept array as parameter int [] getSortArray(): this function can perform Remove the duplicate element form array and displary in remening element and return array

Q19. Write program to create class name as FindEvenNo with three functions void setArray(int a[]): this function can accept array as parameter void minArray(): this function can perform display min no from array void maxArray(): this function can perform display max no from array

Q20. Write program to create class name as Reverse with two functions void setArray(int a[]): this function can accept array as parameter int [] getSortArray(): this function can perform reverse on array and return sorted array

Q21. Write program to create class name as occurrence with two functions void setArray(int a[]): this function can accept array as parameter void getoccurrence (): this function show occurrence of every element form array

Constructor inheritance Abstract class interface 06/07/2024

Q1. Write a program to crate class name as Value with single function name as setValue(int,int) and we have to create three child classes name as Add with function int getAdd(), Mul with function getMul() and Div with function getDiv() and getAdd() function return addition of two value which is inherited from Value class, getMul() function return multiplication of two values which is inherited from Value class and gitDiv() function return division of two values which is inherited from Value class.

Q2. Write program to create class name Area with methods name as void setRadius(float radius) and void setLengthWidth(int len,int wid) and two child classes name as Circle and Rectangle so you have to define float getCircleArea() method in Circle child class and calculate area of circle and return it and You have to define getRectArea() method in Rectangle class and calculate area of rectangle and return it

Q3. Write Program create class name as ArrSum with method void setValue(int arr[]) you have to create child class name as GetSum with method int getArrSum() you have to accept array values from ArrSum and calculate its sum and return it

Q4. Write program to Create class name as PersonalInfo with parameterized constructor

PersonalInfo(String name, String middlename, String lastname) and you have to create class name as

ProfessionalInfo with parameterized constructor like as ProfessionalInfo(int id,String des,int

salary,String skillset) and you have to inherit PersonalInfo class in ProfessionalInfo and pass

parameter from ProfessionalInfo class to PersonalInfo using super() constructor and you have to

define void show() method in ProfessionalInfo and you have to show the all data in show() method.

Q5. Write Program to perform method overriding you have to create class name as ArrParent with method

void setValue(int arr[]): this method can accept array as parameter

void arrangeSeq(): this method can display array as per user input sequence

You have to create two child class name as ArrangeAscendingOrder and you have to inherit

ArrParent class in it and override arrangeSeq() method in ArrangeAscendingOrder and sort array and

display in ascending order and you have to create one more class name ReverseArray and override

arrangeSeq() method from ArrParent and reverse array and display it.

Q6. Write Program to create abstract class name as Value with one abstract and one non abstract method

void setValue(int ,int): this is non abstract method with two parameter abstract int getResult(): this is abstract method and you have two child class name as Power and you have to override getResult() method in Power class and calculate power of two values and return it as well as SearchDigit and you have to override getResult() consider first parameter of setValue() is number and second parameter is digit and you

Q7. Write Program to create class name as ArrAbs with two methods void setArray(int arr[],int []): this function is used for accept array as parameter abstract int [] getResultantArray(): this function can return resultant array from different child classes.

have to search digit in number and return it and if digit not found return -1

You have to create two classes name as InterSection you have to override getResultantArray() method in Intersection and perform intersection of array which we pass in setArray() function and return it as well as you have to create one more class name as Union you have to override getResultantArray() and perform union on two array and return resultant array

Q8. Write program to create interface name as CharOperator with method void setCharArr(char []): this function is used for accept array as parameter char [] getArrResult(): this is abstract function and return character array as result.

You have to create two implementer class names as ConvertToUpper and ChangeAlterNateChar you have to implement the CharOperator interface in the ConvertToUpper class and override both methods and convert lowercase character to uppercase and you have to implement the CharOperator in ChangeAlterNateChar and override both methods and convert even position characters as Upper and odd position characters in lower.

- Q9. Write a program to create and Demonstrate code for multiple inheritance using the interface.
- Q10. Achieve the constructor chaining by using this keyword.
- Q11. Achieve the constructor chaining by using super keyword.
- Q12. Write one java program to achieve the loose coupling by using inheritance.

String, File Handling, Thread 07/07/2024

- 1. Write a JAVA program to count total number of words in a string.
- 2. Write a JAVA program to find reverse of a string.
- 3. Write a JAVA program to check whether a string is palindrome or not.
- 4. Write a JAVA program to reverse order of words in a given string.
- 5. Write a JAVA program to find first occurrence of a character in a given string.
- 6. Write a JAVA program to find last occurrence of a character in a given string.
- 7. Write a JAVA program to search all occurrences of a character in given string.
- 8. Write a JAVA program to count occurrences of a character in given string.
- 9. Write a JAVA program to find highest frequency character in a string.
- 10. Write a JAVA program to find lowest frequency character in a string.
- 11. Write a JAVA program to count frequency of each character in a string.
- 12. Write a JAVA program to remove first occurrence of a character from string.
- 13. Write a JAVA program to remove last occurrence of a character from string.
- 14. Write a JAVA program to remove all occurrences of a character from string.
- 15. Write a JAVA program to remove first occurrence of a word from string.
- 16. Write a JAVA program to remove last occurrence of a word in given string.
- 17. Write a JAVA program to remove all occurrence of a word in given string.
- 18. Write a JAVA program to trim leading white space characters from given string.
- 19. Write a JAVA program to trim trailing white space characters from given string.

- 20. Write a JAVA program to trim both leading and trailing white space characters from given string.
- 21. Write a JAVA program to remove all extra blank spaces from given string.
- 22. WAP a JAVA program to reverse the string without using inbuilt functions?
- 23. Write a JAVA program to replace all occurrences of a character with another in a string.
- 24. Write a JAVA program to find first occurrence of a word in a given string.
- 25. Write a JAVA program to find last occurrence of a word in a given string.
- 26. Write a JAVA program to search all occurrences of a word in given string.
- 27. Write a JAVA program to count occurrences of a word in a given string.
- 28. Write a JAVA program to remove first occurrence of a word from string.
- 29. Write a JAVA program to remove last occurrence of a word in given string.
- 30. Write a JAVA program to remove all occurrence of a word in given string.

File Handlling

1. Write a program in java to create and store information in a text file.

Test Data:

Input a sentence for the file: This is the content of the file test.txt. Expected Output:

The file test.txt created successfully...!!

2. Write a program in java to read an existing file.

Test Data:

Input the file name to be opened: test.txt

Expected Output:

The content of the file test.txt is:

This is the content of the file test.txt.

3. Write a program in java to write multiple lines to a text file.

Test Data:

Input the number of lines to be written: 4

:: The lines are ::

test line 1

test line 2

test line 3

test line 4

Expected Output:

The content of the file test.txt is:
test line 1
test line 2
test line 3
test line 4
4. Write a program in java to read the file and store the lines in an array. Test Data: Input the file name to be opened: test.txt Expected Output:
The content of the file test.txt are :
test line 1
test line 2
test line 3
test line 4
5.Write a program in java to find the number of lines in a text file. Test Data : Input the file name to be opened : test.txt Expected Output :
The lines in the file test.txt are : 4
6. Write a program in java to find the content of a file and the number of lines in a text file. Test Data : Input the filen ame to be opened : test.txt <i>Expected Output</i> :
The content of the file test.txt are :
test line 1
test line 2
test line 3
test line 4
The lines in the file are: 4
7. Write a program in java to count the number of words and characters in a file. Test Data: Input the file name to be opened: test.txt

Expected Output:

The content of the file test.txt is:
test line 1
test line 2
test line 3
test line 4
The number of words in the file test.txt are: 12
The number of characters in the file test.txt are: 36
8. Write a program in C to delete a specific line from a file.
Assume that the content of the file test.txt is :
test line 1
test line 2
test line 3
test line 4
Test Data : Input the file name to be opened : test.txt Input the line you want to remove : 2 Expected Output :
The content of the file test.txt is :
test line 1
test line 3
test line 4
9. Write a program in java to replace a specific line with another text in a file.
Assume that the content of the file test.txt is :
test line 1
test line 2
test line 3
test line 4
Test Data : Input the file name to be opened : test.txt Input the content of the new line : Yes, I am the new text instead of test line 2 Input the line no you want to replace : 2 Expected Output :

Replacement did successfully!!
10. 10. Write a program in C to append multiple lines to the end of a text file.
Assume that the content of the file test.txt is :
test line 1
test line 2
test line 3
test line 4
Test Data: Input the file name to be opened: test.txt Input the number of lines to be written: 3 The lines are: test line 5 test line 6 test line 7 Expected Output:
The content of the file test.txt is:
test line 1
test line 2
test line 3
test line 4
test line 5
test line 6
test line 7
11 • Write a program in java to copy a file to another name.
Assume that the content of the file test.txt is :
test line 1
test line 2
test line 3
test line 4
Test Data :

Input the source file name : test.txt

Expected Output :
The file test.txt copied successfully in the file test1.txt.
If you read the new file you will see the content of the file :
test line 1
test line 2
test line 3
test line 4
12. Write a program in C to merge two files and write them to another file.
Assume that the content of the file test.txt and test1.txr is:
The content of the file test.txt is:
This is the file test.txt.
The content of the file test1.txt is:
This is the file test1.txt.
Test Data: Input the 1st file name: test.txt Input the 2nd file name: test1.txt Input the new file name where to merge the above two files: mergefiles.txt Expected Output:
The two files merged into mergefiles.txt file successfully!!
Here is the content of the merge file mergefiles.txt :
The content of the file mergefiles.txt is:
This is the file test.txt.
This is the file test1.txt.
13. Write a program in java to encrypt a text file.
Assume that, the content of the file test.txt is:
Welcome to w3resource.com.
Test Data : Input the name of file to encrypt : test.txt Expected Output :
File test.txt successfully encrypted!!

Input the new file name: test1.txt

If you read the file test.txt you will see the following:

14. Write a program in C to decrypt a previously encrypted file.

Assume that, the content of the file test.txt was:

After encryption, the content of the file is:

Welcome to w3resource.com.

Thread

- Q16. What is thread priority in java and explain all types of thread priority?
- Q17. What is a daemon thread in java?
- Q18. Can we create a user thread as a daemon thread?
- Q19. Why do we need to implement a thread using a Runnable interface?
- Q20 Write code for creating a thread using the Runnable interface

Collection & Map 08/07/2024

- 1. How To Sort HashMap In Java By Keys And Values
- 2. Write a java program to sort an ArrayList.
- 3. Write a program Find the maximum and minimum program in ArrayList?
- 4. write a program Take an ArrayList add 5 Employee Objects and sort data by salary.
- 5. How To Iterate Or Loop Over HashMap (Map) In Java With Example?
- 7. How To Convert Array To TreeSet In Java?
- 8. find the character of occurrence using LinkedHashMap.
- 9. Write a program to find the number of occurrences in a string. by providing many strings using Map?
- 10. Remove The Duplicate value from List.
- Q11. WAP to create a Vector, store 5 values in it, and find max and min values from collection without using any inbuilt method?

- Q12. WAP to create ArrayList and store 10 values in it and find the occurrence of every value in ArrayList?
- Q13. WAP to create LinkedList and store 10 values in it and search particular values from LinkedList? Q14.WAP to create ArrayList and store 5 employee objects in it and display it?
- Q15. WAP to create ArrayList and store 5 player detail in it with id, name, and run and search player record using its id.
- Q16. WAP to create HashSet store 10 values in it and display it
- Q17. WAP to create LinkedHashSet and store 5 employee data in it and display it?
- Q18. WAP to create TreeSet and store 10 values in it and display it?
- Q 19and store value in it and find the occurrence of every element using Linked HashMap
- Q20. WAP to create input string split its word and find the repetitive word in the string using Linked HashMap
- Q 21. Write a Java code in which you have to find the intersection from two HashSet
- Q22. Write a Java code in which you have to create an unmodified list collection
- Q23. Write a Java Code in which you have to create a Synchronized Set Collection.
- Q23. Write a Java code in which you have to find the Maximum Value and Key from HashMap
- Q 24. Write a Java Code in Which you have to Find The Last Key and Value From TreeMap
- Q 25. Write A Java Code in Which you Have To find the first key And Value From TreeMap
- Q.26 Write a Java code in which you have to move all zero value at end of array

Ex.arr[]={11,0,22,44,66,0,99,0}

Output Required : arr[]{11,22,44,66,99,0,0,0};

Q 27. Write a Java program to insert elements into the linked list at the first and last positions.

Q28 .Write a Java program to remove the first and last elements from a linked list.

Q29. Write a Java program to copy all mappings from the specified map to another map.

Q30 Write a Java program to get a collection view of the values contained in this map.

Test in all core java 09/07/2024

Advance java

JDBC: 10/07/2024

Employee Table

Column Name	Data Type	Nulla ble	Default	Primary Key
ID	NUMBER	No	-	1
NAME	VARCHAR2(4000)	Yes	-	-
PASSWORD	VARCHAR2(4000)	Yes	-	-
EMAIL	VARCHAR2(4000)	Yes	-	-
COUNTRY	VARCHAR2(4000)	Yes	-	-
				1 - 5

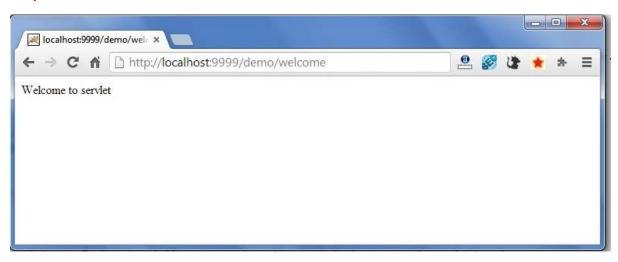
1). Create the JDBC connection and establish the connection

- i. Create The Employee Table By using JDBC.
- ii. Insert the data in the Employee Table.
- iii. Fetch The Employee data.
- iv. Update The Employee Data by using name.
- v. Delete The data by using id.
- vi. Fetch the employee data Start with a name like A.
- vii. Fetch the employee data ends with a like sh.

Servlet and Jsp 11/07/2024

1. Create a Dynamic web project add the Servlet, and submit the HTML form print Welcome Servlet.

Output:



2. Create a Cookie Object, store the username and password in Cookie, and view the cookie using servlet.

Output:



3. Create a JSP page in Dynamic Project and Perform an addition program or print the Current Date and Time to view the Page.

Output:



Addition is 300

Thu Jul 04 09:48:59 IST 2024

- 4. Create a Dynamic web Project using JSP and servlet and perform the CRUD example.
 - I. Create the Dynamic Web Project using Eclipse.
 - II. Design the login and registration page
 - III. Submit the login page to the Controller
 - IV. Design The view Page for Displaying Employee Data with the Delete and update column

The following images reference purpose:





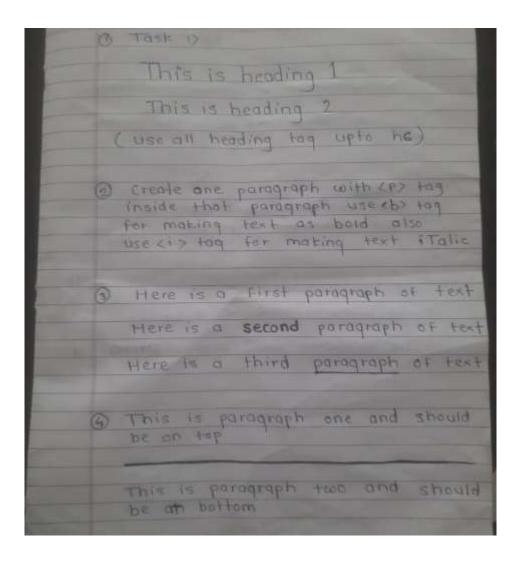


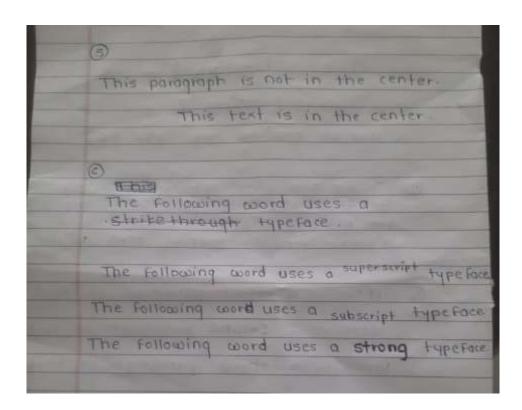
Test in JDBC SERVLET SQL 14/07/2024

HTML 15/07/2024

- 1. Create an HTML file (e.g. first_page.html) that specifies a page that contains a heading and two Paragraphs of text. Use the HTML tags <h1>, </h1>, , <div> and </div> in this exercise. As the texts in the Heading and paragraphs, you can use any text you like.
 - -Add an unordered list to this web page. An unordered list should look I like the following when it is shown by a browser:
 - An unordered list can be specified with the tags and .
 - An unordered list typically contains several list items that can be Specified With tags and
 - -After you have created your unordered list, check out what happens when you Convert it to an ordered list by replacing the tags and with and , respectively.
 - -Add an image to your web page. In this exercise, you must use the tag. As an image, you can use any .jpg or .png file you find on the Internet.
- 2. Create another .html file that contains a heading and a couple of paragraphs. You could name this new file another_page.html, and you should place it into the same folder where your first .html is. After you have created the new .html page, add a link to the first page so that the browser will load another_page.html when you click the text Go to the other page. on the first page. You need to use the <a> and tags in this exercise. Inside the tag <a> you need to use a href attribute that specifies which page will be loaded when the link is clicked also use the tooltip for <a> tag that says "This leads you to another page." when the mouse cursor is over the link.

3. Completed the assignment as mentioned below image





1. Use the image map concept and perform the following task-When we click on Mouse, Diary, Keyboard, or Pen it will redirect to another webpage that tells the information about that device.



Image Link:- https://dotnettutorials.net/wp-content/uploads/2021/11/word-image-484.png

 ${\bf 2.}\;$ Use the Audio and Video tag concept and perform the following task

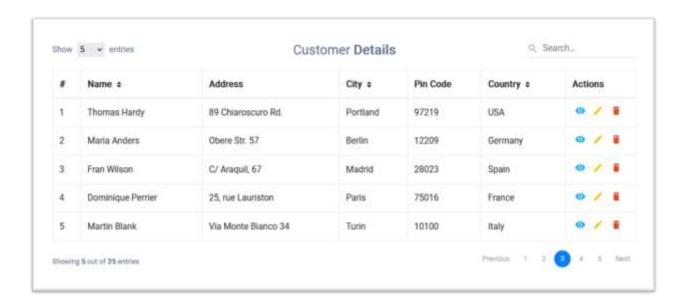
- Use the below audio link and demonstrate an Audio Tag

Audio Link:- https://samplelib.com/lib/preview/mp3/sample-3s.mp3

- Use the below Video link and demonstrate a Video Tag

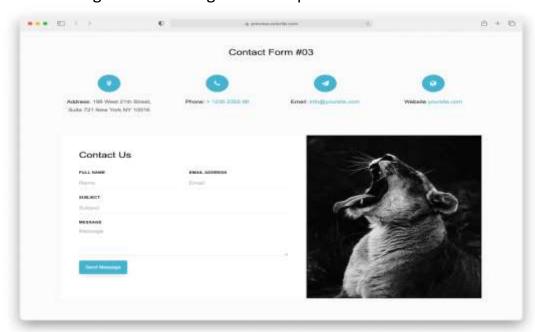
Video Link:- https://media.w3.org/2010/05/sintel/trailer.mp4

3. Design the following Table template

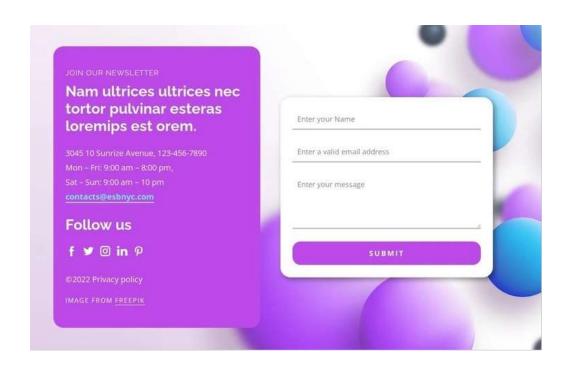


Html with CSS 16/07/2024

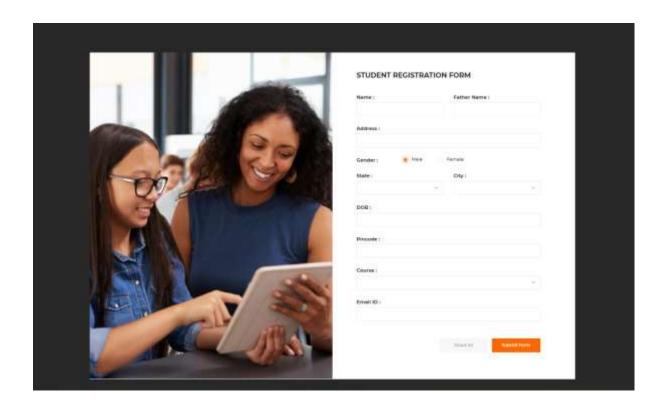
1. Design the following Form Template



2. Design the following Form Templates







CONTACT US

We align leaders around a shared purpose and strategic story that catalyzes their business and brand to take action.



3.Design the following Form Template and demonstrate background image properties.





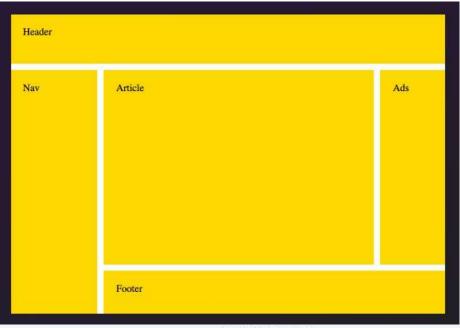


Design the following Form Template, and demonstrate flexbox and position properties.



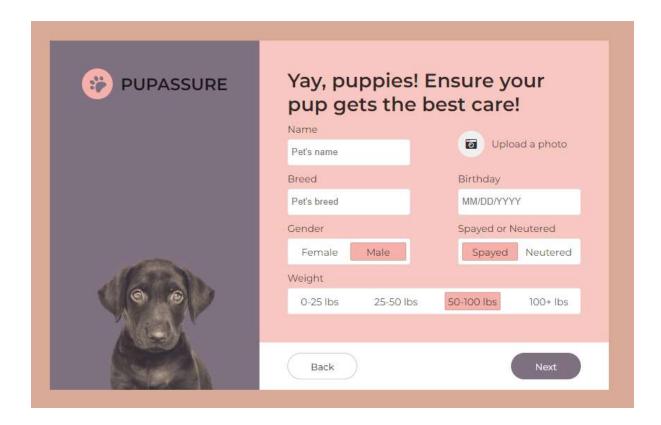






MY CARDS LIGHT





JavaScript 17/07/2024

Topic wise Javascript Assignment

Basic Program of Js on datatype

- 1) Write a javascript program in which you have to print the values of all data type
- 2) Write a Javascript program in which you have to check given no Positive Nigitive Or Zero using Ternary Operator in Js

Conditional Statement

Write a JavaScript conditional statement to sort three numbers. Display an alert box to show the results.

Sample numbers: 0, -1, 4

Output: 4, 0, -1

Looping

3) print the following pattern in console using javascript for loop
\$
\$\$
\$\$\$
\$\$\$\$
%%%%%
%%%%
%%%
%%
%
Q . Write a JavaScript program that iterates integers from 1 to 100. But for multiples of three print "Fizz" instead of the number and for multiples of five print "Buzz". For numbers multiples of both three and five print "FizzBuzz" $ \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2}$
Q 4) Javascript Program to Generate a Random Number
Q 5) JavaScript Program to Print All Prime Numbers in an Interval
Array
Q .Write a JavaScript function to check whether an `input` is an array or not.
Test Data :
console.log(is_array('w3resource'));
console.log(is_array([1, 2, 4, 0]));
false
true
Q . Write a simple JavaScript program to join all elements of the following array into a string.
Q . Write a simple JavaScript program to join all elements of the following array into a string.
Q . Write a simple JavaScript program to join all elements of the following array into a string. Expected Output:

"Red, Green, White, Black"

"Red+Green+White+Black"

Q .There are two arrays with individual values. Write a JavaScript program to compute the sum of each individual index value in the given array.

Sample array:

array1 = [1,0,2,3,4];

array2 = [3,5,6,7,8,13];

Expected Output:

[4, 5, 8, 10, 12, 13]

Q .Write a JavaScript program to find the most frequent item in an array.

Sample array: var arr1=[3, 'a', 'a', 'a', 2, 3, 'a', 3, 'a', 2, 4, 9, 3];

Sample Output: a (5 times)

String:

Write a JavaScript function to extract unique characters from a string.

Example string: "thequickbrownfoxjumpsoverthelazydog"

Expected Output: "thequickbrownfxjmpsvlazydg"

Function

6) write a javascript program to find the power of given number up to given base using exponentiation operator(**).

note: use a function for program.

7) JavaScript Program to Find Sum of Natural Numbers Using Recursion take n from user

Ex n = 10

O/P= 55

8. Write a JavaScript function that returns a string that has letters in alphabetical order.

Example string: 'webmaster'

Expected Output: 'abeemrstw'

Assume punctuation and numbers symbols are not included in the passed string.

Q 9) Write a JavaScript function that accepts a string as a parameter and converts the first letter of each word into upper case.

Example string: 'the quick brown fox'

Expected Output: 'The Quick Brown Fox'

Event Handling

- 1. Write a JavaScript program that creates a button and add a click event listener to log a message when it's clicked.
- 2. Write a JavaScript program to create a dropdown menu that shows and hides its options when clicked.
- 3. Write a JavaScript program that implements a "form" validation that displays an error message if a required field is left empty when submitting the form.
- 4. Write a JavaScript function that listens for a double click on an element and performs a specific action.
- 5. Write a JavaScript function that changes the background color of an element when a mouse enters it.

DOM

1. Here is a sample html file with a submit button. Now modify the style of the paragraph text through javascript code.

Sample HTML file :

<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>JS DOM paragraph style</title>
</head>

```
<body>
JavaScript Exercises - w3resource
<div>
<button id="jsstyle"
onclick="js_style()">Style</button>
</div>
</body>
</html>
Clicking on the button the font, font size, and color of the paragraph text will be changed.
2. Write a JavaScript function to get the values of First and Last names of the following form.
Sample HTML file:
<!DOCTYPE html>
<html><head>
<meta charset=utf-8 />
<title>Return first and last name from a form - w3resource</title>
</head><body>
<form id="form1" onsubmit="getFormvalue()">
First name: <input type="text" name="fname" value="David"><br>
Last name: <input type="text" name="lname" value="Beckham"><br>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

```
Write a JavaScript function to add rows to a table.
```

Sample HTML file:

```
<!DOCTYPE html>
<html><head><meta charset=utf-8 />
<tittle>Insert row in a table - w3resource</title>
</head><body>

Row1 cell1

Row2 cell1

Row2 cell2

Arbenus cell2

Row2 cell2

Row3 cell2

Row4 cell2

Row5 cell2

Row6 cell2

Row7 cell2

Row7 cell2

Row8 cell2

Row8 cell2

Row8 cell2

Row9 cell2

Row9
```

18/07/2024

CallBack Function

Question: Write a program that filters an array of numbers to only include even numbers using a callback function.

Question: Write a program that prints "Hello" followed by a name after 5 seconds using a callback function.

JS Object

2. Write a JavaScript program to delete the rollno property from the following object. Also print the

object before or after deleting the property.

```
var student = {
    name : "David Rayy",
    sclass : "VI",
```

rollno: 12

};

Sample object:

Write a JavaScript program to display the reading status (i.e. display book name, author name and reading status) of the following books.

JSON

write a javascript program to Converting a JavaScript Object to JSON

REGEXP

ceate a one from and handle the all validation on fileds of form using regular exp in javascript

Name

Email

Contact

Password

confirm password

form must be contain fields like

ES6

Write a JavaScript program to filter out the specified values from a specified array. Return the original array without filtered values.

Use Array.prototype.filter() and Array.prototype.includes() to pull out the values that are not needed.

Set Array.prototype.length to mutate the passed in an array by resetting its length to 0.

Use Array.prototype.push() to re-populate it with only the pulled values.

Write a JavaScript function called calculateAverage that takes any number of numeric arguments and returns the average of all those numbers.

Explanation:

This question requires you to utilize the rest operator (...) to collect an indefinite number of arguments passed to the calculateAverage function. Inside the function, you'll need to:

Use the rest operator to gather the arguments into an array.

Calculate the total sum of all the numbers in the array.

Divide the total sum by the number of arguments (array length) to find the average.

Return the calculated average value.

Asyn and Promises:

Q Write a JavaScript function that takes a callback and invokes it after a delay of 2 second.

Q. write a program in which you have to check gievn no is odd or even using promises in javascript

OOP

Q Write a JavaScript program to create a class called "Person" with properties for name, age and country. Include a method to display the person's details. Create two instances of the 'Person' class and display their details.

Q Write a JavaScript program that creates a class called 'Vehicle' with properties for make, model, and year. Include a method to display vehicle details. Create a subclass called 'Car' that inherits from the 'Vehicle' class and includes an additional property for the number of doors. Override the display method to include the number of doors.

Ajax

Write a javascript program in which you have to demonstrate Ajax

Test in HTML, CSS, JavaScript 19/07/2024

SQL (DDL, DML, TCL, DQL, Constraints, Like Operator, Aggregate Function) 20/07/2024

The following table are sample table using this table you can perform all Sql Opertion

Sample table: Customers

customer_id salesman_id	cust_name		city	I	grade	
+		+-		+-		
_						
3002	Nick Rimando		New York		100	5001
3007	Brad Davis		New York		200	5001
3005	Graham Zusi		California		200	5002
3008	Julian Green		London		300	5002
3004	Fabian Johnson		Paris		300	5006
3009	Geoff Cameron		Berlin		100	5003
3003	Jozy Altidor		Moscow	1	200	5007
3001	Brad Guzan		London		1	5005

Sample table: orders

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

Sample table : salesman

salesman_id	name	city	commission
+		+	-+
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13

Sample table: company_mast

COM_ID	COM_NAME
11	Samsung
12	iBall
13	Epsion
14	Zebronics
15	Asus
16	Frontech

Sample table: item_mast

PRO_ID PRO_NAME	PRO_PRICE	PRO_COM
101 Mother Board	3200.00	15
102 Key Board	450.00	16
103 ZIP drive	250.00	14
104 Speaker	550.00	16
105 Monitor	5000.00	11
106 DVD drive	900.00	12
107 CD drive	800.00	12
108 Printer	2600.00	13
109 Refill cartridge	350.00	13
110 Mouse	250.00	12

Sample table: emp_department

DPT_CODE	DPT_NAME	DPT_ALLOTMENT
57	IT	65000
63	Finance	15000
47	HR	240000
27	RD	55000
89	OC	75000

Sample table: emp_details

EMP_IDNO EMP_FNAME	EMP_LNAME	EMP_DEPT
127323 Michale	Robbin	57
526689 Carlos	Snares	63
843795 Enric	Dosio	57
328717 Jhon	Snares	63
444527 Joseph	Dosni	47
659831 Zanifer	Emily	47
847674 Kuleswar	Sitaraman	57
748681 Henrey	Gabriel	47
555935 Alex	Manuel	57

539569 George	Mardy	27
733843 Mario	Saule	63
631548 Alan	Snappy	27
839139 Maria	Foster	57

Using Boolean and Relational operators

- 1. From the following table, write a SQL query to locate the details of customers with grade values above 100. Return customer_id, cust_name, city, grade, and salesman_id.
- 2. From the following table, write a SQL query to find all the customers in 'New York' city who have a grade value above 100. Return customer_id, cust_name, city, grade, and salesman id.
- **3.** From the following table, write a SQL query to find customers who are from the city of New York or have a grade of over 100. Return customer_id, cust_name, city, grade, and salesman id.

SQL Exercises, Practice, Solution - Wildcard and Special operators

- 1. find the details of those salespeople who come from the 'Paris' City or 'Rome' City. Return salesman_id, name, city, commission.
- 2. find the details of the salespeople who come from either 'Paris' or 'Rome'. Return salesman_id, name, city, commission.
- 3. find the details of those salespeople who live in cities other than Paris and Rome. Return salesman_id, name, city, commission.
- 4. retrieve the details of all customers whose ID belongs to any of the values 3007, 3008 or 3009. Return customer_id, cust_name, city, grade, and salesman_id.
- 5. to find salespeople who receive commissions between 0.12 and 0.14 (begin and end values are included). Return salesman id, name, city, and commission.

SQL Functions and Group by

- 1. From the following table, write a <u>SQL query</u> to calculate total purchase amount of all orders. Return total purchase amount.
- 2. From the following table, write a <u>SQL query</u> to calculate the average purchase amount of all orders. Return average purchase amount.
- **3.** From the following table, write a <u>SQL query</u> that counts the number of unique salespeople. Return number of salespeople.
- 4. From the following table, write a <u>SQL query</u> to count the number of customers. Return number of customers.
- 5. From the following table, write a <u>SQL query</u> to determine the number of customers who received at least one grade for their activity.

JOINS 21/07/2024

1. From the following tables write a SQL query to find the salesperson and customer who reside in the same city. Return Salesman, cust name and city.

- 2. From the following tables write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord_no, purch_amt, cust_name, city.
- 3. From the following tables write a SQL query to find the salesperson(s) and the customer(s) he represents. Return Customer Name, city, Salesman, commission.
- 4. From the following tables write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman, commission
- 5. From the following tables write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission.

SUBQUERIES

- 1. From the following tables, write a <u>SQL query</u> to find all the orders issued by the salesman 'Paul Adam'. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.
- 2. From the following tables write a <u>SQL query</u> to find all orders generated by London-based salespeople. Return ord no, purch amt, ord date, customer id, salesman id.
- 3. From the following tables write a <u>SQL query</u> to find all orders generated by the salespeople who may work for customers whose id is 3007. Return ord_no, purch_amt, ord_date, customer_id, salesman_id.
- 4. From the following tables write a <u>SQL query</u> to find the order values greater than the average order value of 10th October 2012. Return ord_no, purch_amt, ord_date, customer_id, salesman_id.
- 5. From the following tables, write a SQL query to find all the orders generated in New York city. Return ord_no, purch_amt, ord_date, customer_id and salesman_id.

VIEW

- 1. From the following table, create a view for those salespeople who belong to the city of New York.
- 2. From the following table, create a view for all salespersons. Return salesperson ID, name, and city.
- 3. From the following table, create a view to locate the salespeople in the city 'New York'.
- 4. From the following table, create a view that counts the number of customers in each grade.
- 5. From the following table, create a view to count the number of unique customers, compute the average and the total purchase amount of customer orders by each date.

Test in SQL 22/07/2024