

J2SE(CORE JAVA)

WEEK-1

1. Write a java program to find the factorial of a number.
- 2 Write a java program which initialization earning of an employee. The program should calculate the income tax to be paid by the employee as per the criteria given below

Slab rate	It rate
Upto Rs. 50,000	Nil
Upto Rs. 60,000	10% on additional amount
Upto Rs. 1,50,000	20% on additional amount
Above Rs. 1,50,000	30% on additional amount

Hint: - Run: - java calculates 1,25,000
Result: - income tax is.....

- 3 WAP to input n numbers on command line argument and calculate maximum of them.
- 4 WAP to print the sum and average of the even and odd numbers separately given on command line argument.
- 5 WAP print the following series given n as argument:-

1
2 2
3 3 3

WEEK -2

- 1 Write a program to dynamically initialize memory for storing following values in the following locations-

1 2 3 4
2 4 6
3 6
4

2. WAP to print all the prime numbers in an array of n elements by taking command line arguments.
- 3 Design a class for a bank database the database should support the following operations.
 1. Deposit a certain amount into an account,
 2. Withdrawing a certain amount from an account,
 3. Return a value specifying the amount (i.e. balance) in an amount.
- 4 Define a "Clock" class that does the following: -
 - a. Accept hours, minutes and seconds.
 - b. Check the validity numbers.
 - c. Set the time to AM/PM mode.Use necessary constructors and methods to do the above task.
5. WAP to declare a stack and perform push and pop operation using stack class.

WEEK-3

1. Write method of date class to support the following-
 - a.) Method for validating that the integer-representing month is between 1 & 12 and checking that the day part of the date objects is within the correct range for a month.
 - b.) Obtaining the next day from a given date.
2. Create a person inherit two classes from it politician & sportsman provide constructors & calculate salary & display functions.
3. Create a abstract class employee, having its properties & abstract function for calculating net salary and displaying the information. Drive manager & clerk class from this abstract class & implement the abstract method net salary and override the display method.
4. Write a program that should print squares of natural numbers (1,2...10) the square should not go beyond 100, & array size should not store more than 10 elements. Generate exception if range overflow.
5. WAP to create your own exception as NegativeSizeException whenever negative values are put in an array.

WEEK-4

1. WAP to create two threads,one prints "HELLO" and other prints "HAI".
2. Write down a java program to print even and odd numbers series respectively from two threads: t1 and t2 synchronizing on a shared object
Let t1 print message "ping --- >" and t2 print message ",---pong".
Take as command line arguments, the following inputs to the program:
Sleep Interval for thread t1
Sleep Interval for thread t2
Message per cycle
No of cycles
3. Using methods charAt() & length() of String class, write a program to print the frequency of each character in a string.
"Hello friend"
Output should be
h: 1
d: 1
e: 2
f: 1
(continued for all character in the string)
4. Write a program to count numbers of words in command line argument.
5. WAP in java to check the input characters for uppercase,lowercase,number of digits and other characters.

WEEK -5

1. Create an applet to find maximum of 3 numbers taking input from html file by parameter.
2. WAP to create an Applet having three buttons red,green,blue.On clicking on red button the background color should be changed to red,on clicking in blue button the color should be changed to blue and so on.
- 3 Write a program to make connection to a database of Microsoft access, named employee. The table has field's empno, empname, salary, destination, and department. Display all the records where department is computer & destination is System Analyst.
- 4 Write a program insert a record in employee database, the record is inputted by user as arguments.
- 5 A database named student contains name and grade.WAP to access the database and display the grade of the student who is selected(Display the names in the dropdown list).

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