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| **Sr. No.** | **Name of Experiment** |
| **1** | Write a Program that displays Welcome to Java, Learning Java Now and Programming is fun. |
| **2** | Write a program that solves the following equation and displays the value x and y:  1) 3.4x+50.2y=44.5  2) 2.1x+.55y=5.9  (Assume Cramer’s rule to solve equation ax+by=e and x=ed-bf/ad-bc, cx+dy=f and y=af-ec/ad-bc ) |
| **3** | Write a program that reads a number in meters, converts it to feet, and displays the result. |
| **4** | Body Mass Index (BMI) is a measure of health on weight. It can be calculated by taking your weight in kilograms and dividing by the square of your height in meters. Write a program that prompts the user to enter a weight in pounds and height in inches and displays the BMI.  Note: - 1 pound=.45359237 Kg and 1 inch=.0254 meters. |
| **5** | Write a program that prompts the user to enter three integers and display the integers in decreasing Order. |
| **6** | Write a program that prompts the user to enter a letter and check whether a letter is a vowel or constant. |
| **7** | Assume a vehicle plate number consists of three uppercase letters followed by four digits. Write a program to generate a plate number. |
| **8** | Write a program that reads an integer and displays all its smallest factors in increasing order. For example if input number is 120, the output should be as follows: 2, 2,2,3,5. |
| **9** | Write a method with following method header.  public static int gcd(int num1, int num2)  Write a program that prompts the user to enter two integers and compute the gcd of two integers. |
| **10** | Write a test program that prompts the user to enter ten numbers, invoke a method to reverse the numbers, display the numbers. |
| **11** | Write a program that generate 6\*6 two-dimensional matrix, filled with 0’s and 1’s, display the matrix, check every raw and column have an odd number’s of 1’s. |
| **12** | Write a program that creates a Random object with seed 1000 and displays the first 100 random integers between 1 and 49 using the NextInt (49) method. |
| **13** | Write a program for calculator to accept an expression as a string in which the operands and operator are separated by zero or more spaces.  For ex: 3+4 and 3 + 4 are acceptable expressions. |
| **14** | Write a program that creates an Array List and adds a Loan object , a Date object , a string, and a Circle object to the list, and use a loop to display all elements in the list by invoking the object’s to String() method. |
| **15** | Write the bin2Dec (string binary String) method to convert a binary string into a decimal number. Implement the bin2Dec method to throw a NumberFormatException if the string is not a binary string. |
| **16** | Write a program that prompts the user to enter a decimal number and displays the number in a fraction.  Hint: Read the decimal number as a string, extract the integer part and fractional part from the string. |
| **17** | Write a program that displays a tic-tac-toe board. A cell may be X, O, or empty. What to display at each cell is randomly decided. The X and O are images in the files X.gif and O.gif. |
| **18** | Write a program that moves a circle up, down, left or right using arrow keys. |
| **19** | Write a program that displays the color of a circle as red when the mouse button is pressed and as blue when the mouse button is released. |
| **20** | Write a GUI program that use button to move the message to the left and right and use the radio button to change the color for the message displayed. |
| **21** | Write a program to create a file name 123.txt, if it does not exist. Append a new data to it if it already exist. Write 150 integers created randomly into the file using Text I/O. Integers are separated by space. |
| **22** | Write a recursive method that returns the smallest integer in an array. Write a test program that prompts the user to enter an integer and display its product. |
| **23** | Write a generic method that returns the minimum elements in a two dimensional array. |
| **24** | Define MYPriorityQueue class that extends Priority Queue to implement the Clonnable interface and implement the clone() method to clone a priority queue. |
| **25** | Write a program that reads words from a text file and displays all the nonduplicate words in descending order. The text file is passed as a command-line argument. |