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| **DKTE T&EI** | TEXTILE & ENGG. INSTITUTE, ICHALKARANJI | | | | | |
| **EXPERIMENT LIST** | | | | | |
| MANUAL NO : DKTE-AIDS-JP | | | SUBJECT: Java Programming | | |
| LABORATORY : New LAB 1 | | | YEAR/PART: T.Y. B. Tech./I | | |
| DEPARTMENT : A. I. and D. S. | | ISSUE NO. :I | | ISSUE DATE: 01/07/2024 | | PAGE 01 of 01 |
| CIE : 50 | | | SEE : - 50 | | Total- 100 | |

MASTER LIST OF EXPERIMENT

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| EXPT NO. | EXPERIMENT DESCRIPTION | REV  NO. | REV. DATE | Mapped  CO |
| E01 | Write a program to find out day of the given date using  command line argument. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E02 | Write a program to implement matrix operations. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E03 | Shivaji University provides education in different courses and has more than 200 faculties working in various departments. The university wants to calculate the annual salary for each faculty member. Basic salary is provided for all faculties and an additional component is paid based on their designation or qualification. You need to help the university in creating an application for them by implementing the classes. | 0 | 01/07/2024 | ADP308.2 ADP308.3 |
| E04 | Create a class SavingsAccount. Demonstrate the static variable and static method for calculation of monthly interest  and modification of interest rate. | 1 | 01/07/2024 | ADP308.2 ADP308.3 |
| E05 | Write a program to demonstrate single inheritance by creating a class Person and deriving classes Student & Employee from it. Define class person having data members name, birthdate, height, weight, address and calculateAge method. Derive class Student with members as roll no, marks, calAvg().Also derive class Employee with members as empId, salary, calTax(). | 1 | 01/07/2024 | ADP308.2ADP308.3 |
| E06 | Happy Mobiles is a mobile manufacturer and they want to increase the rate of production. So, they have decided to add a feature for easily testing the compatibility of mobile operating system with generation of cellular network. You need to help them by creating an application based on the class diagram. Develop a class that implement these interfaces for achieving multiple inheritance. | 0 | 01/07/2024 | ADP308.2 ADP308.3 |
| E07 | Write a program to implement mathematical package for arithmetic, statistical and trigonometric operations. | 1 | 01/07/2024 | ADP308.2 ADP308.3 |
| E08 | Write a class having two integer data members. Provide facility to add, subtract, multiply and divide these numbers. If addition goes above 1000, it generates TooLongAddition exception. If subtraction is below 0, it generates Negative  Answer exception. If multiplication is above 5000, it generates TooLongMultiplication exception. | 1 | 01/07/2024 | ADP308.2 ADP308.3 |
| E09 | Write a program to accept a file name from user and perform read, write/append operations on it. | 1 | 01/07/2024 | ADP308.2 ADP308.3 |
| E10 | Take Student information such as Roll No, Class, age,  weight, height, city, phone from user and store it in the file using DataOutputStream and FileOutputStream and Retrive  data using DataInputStream and FileInputStream and display the result. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E11 | Write a program to develop Swing GUI based standard  calculator. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E12 | Write a program to demonstrate key and mouse event. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E13 | Write a program to create a Notepad. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |
| E14 | Write a Java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints.  If the value is odd, the third thread will print the value of cube of the number. | 1 | 01/07/2024 | ADP308.2 ADP308.3 |
| E15 | Write a program to demonstrate collection and generics. | 1 | 01/07/2024 | ADP308.2,  ADP308.3 |

* AS DECIDED BY THE INSTITUTE.

