Annexure – 18.15 (XIV)

Subject Name: PYTHON PROGRAMMING

Subject Code: BPLC105B

Semester: 1

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	a. Develop a python program to read 2 numbers from the keyboard and perform the basic arithmetic operations based on the choice. (1-Add, 2-Subtract, 3-Multiply, 4-Divide). b. b. Develop a program to read the name and year of birth of a person. Display whether the person is a senior citizen or not.	CO1	L2 -Understand L3 – Apply
Expt-02	a. Develop a program to generate Fibonacci sequence of length (N). Read N from the console. b. Write a python program to create a list and perform the following operations • Inserting an element • Removing an element • Appending an element • Displaying the length of the list • Popping an element • Clearing the list	CO1	L3 – Apply
Expt-03	a. Read N numbers from the console and create a list. Develop a program to print mean, variance and standard deviation with suitable messages. b. Read a multi-digit number (as chars) from the console. Develop a program to print the frequency of each digit with a suitable message.	CO2	L3 – Apply
Expt-04	Develop a program to print 10 most frequently appearing words in a text file. [Hint: Use a dictionary with distinct words and their frequency of occurrences. Sort the dictionary in the reverse order of frequency and display the dictionary slice of the first 10 items.	CO3	L3 – Apply
Expt-05	Develop a program to read 6 subject marks from the keyboard for a student. Generate a report that displays the marks from the highest to the lowest score attained by the student. [Read the marks into a 1-Dimesional array and sort using the Bubble Sort technique].	CO2	L3 – Apply
Expt-06	Develop a program to sort the contents of a text file and write the sorted contents into a separate text file. [Hint: Use string methods strip(), len(), list methods sort(), append(), and file methods open(), readlines(), and write()].	CO3	L2-Understand L3 – Apply
Expt-07	Develop a function named DivExp which takes TWO parameters a, b, and returns a value c (c=a/b). Write a suitable assertion for a>0 in the function DivExp and raise an exception for when b=0. Develop a suitable program that reads two console values and calls the function DivExp.	CO5	L2-Understand
Expt-08	Define a function that takes TWO objects representing complex numbers and returns a new complex number with the sum of two complex numbers. Define a suitable class 'Complex' to represent the complex number. Develop a program to read N (N >=2) complex numbers and to compute the addition of N complex numbers.	CO5	L2-Understand
Expt-09	Text Analysis Tool: Build a tool that analyses a paragraph: frequency of each word, longest word, number of sentences.	CO2	L3 – Apply

Expt-10	Develop Data Summary Generator: Read a CSV file (like COVID data or weather stats), convert to dictionary form, and allow the user to run summary queries: max, min, average by column.	CO3	L3 – Apply
Expt-11	Develop Student Grade Tracker: Accept multiple students' names and marks. Store them in a list of tuples or dictionaries. Display summary reports (average, topper, etc.).	CO2	L3 – Apply
Expt-12	Develop a program to display contents of a folder recursively (Directory) having sub-folders and files (name and type).	CO3	L3 – Apply

Softwares Used:

1. Python IDLE or Jupyter Notebook

Ghousia Institute of Technology for women Bangaluru

As per the syllabus framed by Visvesvaraya Technological University for Ist year B.E Computer science, Information Science and electrical and electronic Branches, the following experiments are set up to fulfill academic requirements.

Sl/No.	Name of the Experiment	Experimental Setup	Course Outcomes
1	.Estimation of total hardness of water by EDTA method.	Conventional analytical experiments are performed using conventional techniques like titration."	CO_2
2	Determination of chemical oxygen demand (COD) of industrial effluent sample.	Conventional analytical experiments are performed using conventional techniques like titration."	CO_5
3	Estimation of iron in TMT bar by diphenyl amine indicator method.	Conventional analytical experiments are performed using conventional techniques like titration."	CO_3
4	Determination of total alkalinity of given water sample.	Conventional analytical experiments are performed using conventional techniques like titration."	CO_2
5	Determination of acid value of solder flux using KOH	Conventional analytical experiments are performed using conventional techniques like titration."	CO1
6	Estimation of acid mixture using conductometric sensor (Conductometry).	This particular experiment is performed using a Digital Conductometric Sensor-304, manufactured by Systonics India Ltd.	CO4
7	Estimation of iron in rust sample using potentiometric	This particular experiment is performed using a	CO_1

	sensor (Potentiometry).	Digital potentiometric Sensor-318, manufactured by Systonics India Ltd.	
8	Determination of pKa of cooling fluids using pH sensor (Glass electrode).	This particular experiment is performed using a Digital P^H meter,MK-VI, manufactured by Systonics India Ltd.	CO_1
9	Estimation of copper present in e-waste using optical sensor (Colorimetry).	This particular experiment is performed using a Digital Conductometric Sensor-112, manufactured by Systonics India Ltd.	CO4
10	Determination of viscosity coefficient of liquid coolant sample.	This was performed by Using "Ostwald vicometer"	CO5

Subject Name: Project Management with Git

Subject Code: BCSL358C

Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Basic Setup and Creation of a New Repository	CO1	L2 – Understand
Expt-02	To add README.md file into the Repository	CO1	L3 – Apply
Expt-03	Creating and Managing Branches	CO2	L3 – Apply
Expt-04	Updating of files in the feature-branch	CO2	L3 – Apply
Expt-05	Merging of Feature-Branch into the Master Branch	CO2	L3 – Apply
Expt-06	Light Weight and Annotated Tags	CO3	L2 – Understand
Expt-07	Analyzing GIT History	CO3	L4 – Analyze
Expt-08	GIT Cherry-pick and Revert	CO3	L4 – Analyze
Expt-09	Git in VS Code	CO4	L2 – Understand
Expt-10	VS Code and Github (Cloning of Repository)	CO5	L3 – Apply
Expt-11	VS Code and Github (Creating of New Repository)	CO5	L3 – Apply

Softwares Used:

1. Git Bash
2. VS Code
3. Git Hub (online)

Subject Name: Project Management with Git

Subject Code: BCSL358C

Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Basic Setup and Creation of a New Repository	CO1	L2 – Understand
Expt-02	To add README.md file into the Repository	CO1	L3 – Apply
Expt-03	Creating and Managing Branches	CO2	L3 – Apply
Expt-04	Updating of files in the feature-branch	CO2	L3 – Apply
Expt-05	Merging of Feature-Branch into the Master Branch	CO2	L3 – Apply
Expt-06	Light Weight and Annotated Tags	CO3	L2 – Understand
Expt-07	Analyzing GIT History	CO3	L4 – Analyze
Expt-08	GIT Cherry-pick and Revert	CO3	L4 – Analyze
Expt-09	Git in VS Code	CO4	L2 – Understand
Expt-10	VS Code and Github (Cloning of Repository)	CO5	L3 – Apply
Expt-11	VS Code and Github (Creating of New Repository)	CO5	L3 – Apply

Softwares Used:

1. Git Bash
2. VS Code
3. Git Hub (online)

Subject Name: Object Oriented Programming with JAVA
Subject Code: BCS306A
Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	a. Develop a JAVA program to add TWO matrices of suitable order N (The value of N should be read from command line arguments).	CO1	L2 - Understand L3 – Apply
Expt-02	Develop a stack class to hold a maximum of 10 integers with suitable methods. Develop a JAVA main method to illustrate Stack operations.	CO2	L3 – Apply
Expt-03	A class called Employee, which models an employee with an ID, name and salary, is designed as shown in the following class diagram. The method raiseSalary (percent) increases the salary by the given percentage. Develop the Employee class and suitable main method for demonstration.	CO2	L3 – Apply
Expt-04	A class called MyPoint, which models a 2D point with x and y coordinates, is designed as follows:	CO2	L3 – Apply
Expt-05	Develop a JAVA program to create a class named shape. Create three sub classes namely: circle, triangle and square, each class has two member functions named draw () and erase (). Demonstrate polymorphism concepts by developing suitable methods, defining member data and main program.	CO3	L3 – Apply
Expt-06	Develop a JAVA program to create an abstract class Shape with abstract methods calculateArea() and calculatePerimeter(). Create subclasses Circle and Triangle that extend the Shape class and implement the respective methods to calculate the area and perimeter of each shape.	CO3	L2- Understand L3 – Apply
Expt-07	Develop a JAVA program to create an interface Resizable with methods resizeWidth(int width) and resizeHeight(int height) that allow an object to be resized. Create a class Rectangle that implements the Resizable interface and implements the resize methods.	CO3	L2- Understand
Expt-08	Develop a JAVA program to create an outer class with a function display. Create another class inside the outer class named inner with a function called display and call the two functions in the main class.	CO3	L2- Understand
Expt-09	Develop a JAVA program to raise a custom exception (user defined exception) for DivisionByZero using try, catch, throw and finally. .	CO4	L3 – Apply
Expt-10	Develop a JAVA program to create a package named mypack and import & implement it in a suitable class.	CO4	L3 – Apply

Expt-11	Write a program to illustrate creation of threads using runnable class. (start method start each of the newly created thread. Inside the run method there is sleep() for suspend the thread for 500 milliseconds). .	CO5	L3 – Apply
Expt-12	Develop a program to create a class MyThread in this class a constructor, call the base class constructor, using super and start the thread. The run method of the class starts after this. It can be observed that both main thread and created child thread are executed concurrently.	CO5	L3 – Apply

Softwares Used:

1. IntelliJ IDEA

Subject Name: DIGITAL DESIGN & COMPUTER ORGANISATION
Subject Code: BCS302
Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Given a 4-variable logic expression, simplify it using appropriate technique and simulate the same using basic gate	CO1	L2 – Understand
Expt-02	Design a 4 bit full adder and subtractor and simulate the same using basic gates.	CO1	L3 – Apply
Expt-03	Design Verilog HDL to implement simple circuits using structural, Data flow and Behavioural model	CO1	L3 – Apply
Expt-04	Design Verilog HDL to implement Binary Adder-Subtractor – Half and Full Adder, Half and Full Subtractor.	CO1	L3 – Apply
Expt-05	Design Verilog HDL to implement Decimal adder.	CO2	L3 – Apply
Expt-06	Design Verilog program to implement Different types of multiplexer like 2:1, 4:1 and 8:1.	CO2	L2 – Understand
Expt-07	Design Verilog program to implement types of De-Multiplexer.	CO2	L4 – Analyze
Expt-08	Design Verilog program for implementing various types of Flip-Flops such as SR, JK and D.	CO2	L4 – Analyze

Softwares Used:

Xillinx ISE

Subject Name: Project Management with Git
Subject Code: BCSL358C
Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Basic Setup and Creation of a New Repository	CO1	L2 – Understand
Expt-02	To add README.md file into the Repository	CO1	L3 – Apply
Expt-03	Creating and Managing Branches	CO2	L3 – Apply
Expt-04	Updating of files in the feature-branch	CO2	L3 – Apply
Expt-05	Merging of Feature-Branch into the Master Branch	CO2	L3 – Apply
Expt-06	Light Weight and Annotated Tags	CO3	L2 – Understand
Expt-07	Analyzing GIT History	CO3	L4 – Analyze
Expt-08	GIT Cherry-pick and Revert	CO3	L4 – Analyze
Expt-09	Git in VS Code	CO4	L2 – Understand
Expt-10	VS Code and Github (Cloning of Repository)	CO5	L3 – Apply
Expt-11	VS Code and Github (Creating of New Repository)	CO5	L3 – Apply

Softwares Used:

1. Git Bash
2. VS Code
3. Git Hub (online)

Subject Name: Operating System
Subject Code: BCS303
Semester: 3

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Develop a c program to implement the Process system calls (fork (), exec(), wait(), create process, terminate process)	CO2	L3 – Apply
Expt-02	Simulate the following CPU scheduling algorithms to find turnaround time and waiting time a) FCFS b) SJF c) Round Robin d) Priority.	CO2	L4 – Analyze
Expt-03	Develop a C program to simulate producer-consumer problem using semaphores.	CO3	L3 – Apply
Expt-04	Develop a C program which demonstrates interprocess communication between a reader process and a writer process. Use mkfifo, open, read, write and close APIs in your program.	CO3	L3 – Apply
Expt-05	Develop a C program to simulate Bankers Algorithm for DeadLock Avoidance.	CO3	L3 – Apply
Expt-06	Develop a C program to simulate the following contiguous memory allocation Techniques: a) Worst fit b) Best fit c) First fit.	CO4	L4 – Analyze
Expt-07	Develop a C program to simulate page replacement algorithms: a) FIFO b) LRU	CO4	L3 – Apply
Expt-08	Simulate following File Organization Techniques a) Single level directory b) Two level directory	CO5	L3 – Apply
Expt-09	Develop a C program to simulate the Linked file allocation strategies.	CO6	L3 – Apply
Expt-10	Develop a C program to simulate SCAN disk scheduling algorithm.	CO6	L4 – Analyze

Softwares Used:

1. Ubuntu Operating System
2. **GCC (GNU Compiler Collection)**
   The standard C compiler on Ubuntu.

Subject Name: Analysis and Design of Algorithm
Subject Code: BCSL403
Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Design and implement C/C++ Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Kruskal's algorithm.	CO4	L3 – Apply
Expt-02	Design and implement C/C++ Program to find Minimum Cost Spanning Tree of a given connected undirected graph using Prim's algorithm.	CO4	L4 – Analyze
Expt-03	a. Design and implement C/C++ Program to solve All-Pairs Shortest Paths problem using Floyd's algorithm. b. Design and implement C/C++ Program to find the transitive closure using Warshal's algorithm.	CO4	L3 – Apply
Expt-04	Design and implement C/C++ Program to find shortest paths from a given vertex in a weighted connected graph to other vertices using Dijkstra's algorithm.	CO4	L3 – Apply
Expt-05	Design and implement C/C++ Program to obtain the Topological ordering of vertices in a given digraph	CO2	L3 – Apply
Expt-06	Design and implement C/C++ Program to solve 0/1 Knapsack problem using Dynamic Programming method.	CO4	L4 – Analyze
Expt-07	Design and implement C/C++ Program to solve discrete Knapsack and continuous Knapsack problems using greedy approximation method.	CO5	L3 – Apply
Expt-08	Design and implement C/C++ Program to find a subset of a given set $S = \{s1 , s2,...,sn\}$ of n positive integers whose sum is equal to a given positive integer d.	CO5	L3 – Apply
Expt-09	Design and implement C/C++ Program to sort a given set of n integer elements using Selection Sort method and compute its time complexity. Run the program for varied values of n> 5000 and record the time taken to sort. Plot a graph of the time taken versus n. The elements can be read from a file or can be generated using the random number generator.	CO1	L3 – Apply

Expt-10	Design and implement C/C++ Program to sort a given set of n integer elements using Quick Sort method and compute its time complexity. Run the program for varied values of n> 5000 and record the time taken to sort. Plot a graph of the time taken versus n. The elements can be read from a file or can be generated using the random number generator.	CO2	L4 – Analyze

Softwares Used:

1. DevC++

Subject Name: Technical Writing using Latex
Subject Code: BCSL456D
Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Develop a LaTeX script to create a simple title page of the VTU project report using suitable logos and text formatting	CO1	L3 – Apply
Expt-02	Develop a LaTeX script to create the certificate page of the report with commands to leave blank spaces for user entry	CO1	L3 – Apply
Expt-03	Develop a LaTeX script to create a document displaying sample Abstract/Summary and Acknowledgement	CO1	L3 – Apply
Expt-04	Develop a LaTeX script to create a document with sections, sub-sections, paragraphs with dummy text, table of contents, header and footer	CO1	L3 – Apply
Expt-05	Develop a LaTeX script to include simple and side-by-side graphics/figures using the subgraph concept	CO2	L3 – Apply
Expt-06	Develop a LaTeX script in two-column format consisting of sections, sub-sections and figures	CO2	L3 – Apply
Expt-07	Develop a LaTeX script to create a document containing tables with proper labels	CO2	L3 – Apply
Expt-08	Develop a LaTeX script to create a document containing paragraphs with at least 10 citations and display references	CO4	L4 – Analyze
Expt-09	Develop a LaTeX script to create a document consisting of two mathematical equations	CO3	L3 – Apply
Expt-10	Develop a LaTeX script to demonstrate numbered theorems, definitions, corollaries and lemmas	CO3	L4 – Analyze
Expt-11	Develop a LaTeX script to design a tree diagram or hierarchical structure using the TikZ library	CO5	L4 – Analyze
Expt-12	Develop a LaTeX script to present an algorithm using algorithm/algorithmic/algorithm2e library	CO5	L3 – Apply

Softwares Used:

1. MikTex
2. TexMaker

Subject Name: DATABASE MANAGEMENT SYSTEM

Subject Code: BCS403

Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	a. Create a table called Employee & execute the following. Employee(EMPNO,ENAME,JOB, MANAGER_NO, SAL, COMMISSION) 1. Create a user and grant all permissions to theuser. 2. Insert the any three records in the employee table contains attributes EMPNO,ENAME JOB, MANAGER_NO, SAL, COMMISSION and use rollback. Check the result. 3. Add primary key constraint and not null constraint to the employee table. 4. Insert null values to the employee table and verify the result.	CO3	L2 -Understand L3 – Apply
Expt-02	Create a table called Employee that contain attributes EMPNO,ENAME,JOB, MGR,SAL & execute the following. 1. Add a column commission with domain to the Employeetable. 2. Insert any five records into the table. 3. Update the column details of job 4. Rename the column of Employ table using alter command. 5. Delete the employee whose Empno is 105.	CO3	L2 -Understand L3 – Apply
Expt-03	Queries using aggregate functions(COUNT,AVG,MIN,MAX,SUM),Group by,Orderby. Employee(E_id, E_name, Age, Salary) 1. Create Employee table containing all Records E_id, E_name, Age, Salary. 2. Count number of employee names from employeetable 3. Find the Maximum age from employee table. 4. Find the Minimum age from employeetable. 5. Find salaries of employee in Ascending Order. 6. Find grouped salaries of employees.	CO3	L3 – Apply
Expt-04	Create a row level trigger for the customers table that would fire for INSERT or UPDATE or DELETE operations performed on the CUSTOMERS table. This trigger will display the salary difference between the old & new Salary. CUSTOMERS(ID,NAME,AGE,ADDRESS,SALARY)	CO4	L3 – Apply
Expt-05	Create cursor for Employee table & extract the values from the table. Declare the variables ,Open the cursor & extrct the values from the cursor. Close the cursor. Employee(E_id, E_name, Age, Salary) t technique].	CO4	L3 – Apply
Expt-06	Write a PL/SQL block of code using parameterized Cursor, that will merge the data available in the newly created table N_RollCall with the data available in the table O_RollCall. If the data in the first table already exist in the second table then that data should be skipped.	CO5	L2-Understand
Expt-07	Install an Open Source NoSQL Data base MangoDB & perform basic CRUD(Create, Read, Update & Delete) operations. Execute MangoDB basic Queries using CRUD operations.	CO5	L2-Understand L3 – Apply

Softwares Used:
1. MySQL
2. MongoDB

Subject Name: Advanced Java

Subject Code: BIS402

Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	a. Implement a java program to demonstrate creating an ArrayList, adding elements, removing elements ,sorting elements of ArrayList. Also illustrate the use of toArray() method	CO1	L2 -Understand L3 – Apply
Expt-02	.Develop a program to read random numbers between a given range that are multiples of 2 and 5, sort the numbers according to tens place using comparator.	CO1	L2 -Understand L3 – Apply
Expt-03	Implement a java program to illustrate storing user defined classes in collection. .	CO1	L3 – Apply
Expt-04	Implement a java program to illustrate the use of different types of string class constructors.	CO1	L3 – Apply
Expt-05	Implement a java program to illustrate the use of different types of character extraction, string comparison, string search and string modification methods	CO2	L3 – Apply
Expt-06	Implement a java program to illustrate the use of different types of StringBuffer methods	CO2	L2-Understand
Expt-07	Demonstrate a swing event handling application that creates 2 buttons Alpha and Beta and displays the text "Alpha pressed" when alpha button is clicked and "Beta pressed" when beta button is clicked.	CO3	L2-Understand L3 – Apply
Expt-08	A program to display greeting message on the browser "Hello UserName", "How Are You?", accept username from the client using servlet.	CO4	L3 – Apply
Expt-09	A servlet program to display the name, USN, and total marks by accepting student detail.	CO4	L3 – Apply
Expt-10	A Java program to create and read the cookie for the given cookie name as "EMPID" and its value as "AN2356".	CO4	L3 – Apply
ccExpt-11	Write a JAVA Program to insert data into Student DATA BASE and retrieve info based on particular queries(For example update, delete, search etc…).	CO5	L3 – Apply
Expt-12	A program to design the Login page and validating the USER_ID and PASSWORD using JSP and DataBase.	CO5	L3 – Apply

Softwares Used:
1. MySQL
2. MongoDB

Subject Name: Technical Writing using Latex
Subject Code: BCSL456D
Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Develop a LaTeX script to create a simple title page of the VTU project report using suitable logos and text formatting	CO1	L3 – Apply
Expt-02	Develop a LaTeX script to create the certificate page of the report with commands to leave blank spaces for user entry	CO1	L3 – Apply
Expt-03	Develop a LaTeX script to create a document displaying sample Abstract/Summary and Acknowledgement	CO1	L3 – Apply
Expt-04	Develop a LaTeX script to create a document with sections, sub-sections, paragraphs with dummy text, table of contents, header and footer	CO1	L3 – Apply
Expt-05	Develop a LaTeX script to include simple and side-by-side graphics/figures using the subgraph concept	CO2	L3 – Apply
Expt-06	Develop a LaTeX script in two-column format consisting of sections, sub-sections and figures	CO2	L3 – Apply
Expt-07	Develop a LaTeX script to create a document containing tables with proper labels	CO2	L3 – Apply
Expt-08	Develop a LaTeX script to create a document containing paragraphs with at least 10 citations and display references	CO4	L4 – Analyze
Expt-09	Develop a LaTeX script to create a document consisting of two mathematical equations	CO3	L3 – Apply
Expt-10	Develop a LaTeX script to demonstrate numbered theorems, definitions, corollaries and lemmas	CO3	L4 – Analyze
Expt-11	Develop a LaTeX script to design a tree diagram or hierarchical structure using the TikZ library	CO5	L4 – Analyze
Expt-12	Develop a LaTeX script to present an algorithm using algorithm/algorithmic/algorithm2e library	CO5	L3 – Apply

Softwares Used:

1. MikTex
2. TexMaker

Subject Name: MICROCONTROLLER LAB

Subject Code: BCS402

Semester: 4

Expt No	Title of the Experiment	COs	RBT Level
Expt-01	Using Keil software, observe the various Registers, Dump, CPSR, with a simple Assembly Language Programs (ALP).	CO1	L2 - Understand L3 – Apply
Expt-02	Develop and simulate ARM ALP for Data Transfer, Arithmetic and Logical operations (Demonstrate with the help of a suitable program).	CO2	L3 – Apply
Expt-03	Develop an ALP to multiply two 16-bit binary numbers.	CO2	L3 – Apply
Expt-04	Develop an ALP to find the sum of first 10 integer numbers.	CO2	L3 – Apply
Expt-05	Develop an ALP to find the largest/smallest number in an array of 32 numbers.	CO2	L3 – Apply
Expt-06	Develop an ALP to count the number of ones and zeros in two consecutive memory locations.	CO2	L2-Understand L3 – Apply
Expt-07	Simulate a program in C for ARM microcontroller using KEIL to sort the numbers in ascending/descending order using bubble sort.	CO3	L2-Understand L3 – Apply
Expt-08	Simulate a program in C for ARM microcontroller to find factorial of a number.	CO3	L2-Understand L3 – Apply
Expt-09	Simulate a program in C for ARM microcontroller to demonstrate case conversion of characters from upper to lowercase and lower to uppercase.	CO4	L2-Understand L3 – Apply
Expt-10	Demonstrate enabling and disabling of Interrupts in ARM.	CO4	L3 – Apply
Expt-11	Demonstrate the handling of divide by zero, Invalid Operation and Overflow exceptions in ARM.	CO4	L3 – Apply

Softwares Used:

1. KEIL MICROVISION4

Subject Name:Machine Learining Lab

Subject Code:BCSL606

Semester:6

ExptNo	TitleoftheExperiment	COs	RBT Level
Expt-01	Histogram & Boxplot creation for dataset features	CO1	L3–Apply
Expt-02	Correlation matrix & pair plot visualization	CO1	L3–Apply
Expt-03	Principal Component Analysis (PCA) for dimensionality reduction	CO2	L4– Analyze
Expt-04	Implement **Find-S** hypothesis algorithm	CO4	L6– Create
Expt-05	k-Nearest Neighbors (KNN) classification	CO4	L6– Create
Expt-06	Locally Weighted Regression algorithm	CO2	L4–Analyze
Expt-07	Linear & Polynomial Regression models	CO3	L5–Evaluate
Expt-08	Decision Tree classification & application	CO3	L5–Evaluate
Expt-09	Naive Bayesian classifier implementation	CO3	L5–Evaluate
Expt-10	k-Means clustering & visualization	CO3	L5–Evaluate

Softwares Used:

1. **Python**
2. **Jupyter Notebook** or Python IDE