

St. Francis Institute of Technology Mumbai

Department of Information Technology

LIST OF EXPERIMENTS

Subject: Computer Programming Paradigm Lab

Academic Year: 2023-24

Class: SE/IT A and B

S.No.	Title of Experiment	Co Addressed	PSO Addressed	PO Addressed
1	a) To implement inheritance using C++ b) To implement inheritance using JAVA	C303.1, C303.2	PSO2	PO1
2	a) To implement data abstraction using JAVA b) To encapsulation using JAVA	C303.1, C303.2	PSO2	PO1
3	To implement arithmetic and logical operations using Haskell	C303.1, C303.2	PSO2	PO1
4	a) To implement functions in Haskell programming b) To implement recursive functions using Haskell programming	C303.3	PSO2	PO1, PO5
5	To implement list comprehensions using Haskell programming	C303.3	PSO2	PO1, PO5
6	a) To build knowledge base based on facts and rules in Prolog b) To implement logical expressions and codes using Prolog	C303.4	PSO2	PO1, PO5
7	To implement list comprehensions using Prolog	C303.4	PSO2	PO1, PO5
8	a) To implement recursive functions using Prolog b) To implement database manipulations using Prolog	C303.4	PSO2	PO1, PO5
9	To implement the concept of thread management and synchronization using concurrent programming	C303.5	PSO2	PO1, PO5
10	To implement the concept of run time program management through exception handling using JAVA/C++	C303.1	PSO2	PO1, PO5
11	Case study on different programming paradigms	C303.1-6	PSO2, PSO4	PO1, PO2

Lab Outcomes:

C303.1	To understand basic concepts of compilation and interpretation, compare and implement different programming paradigm concepts. (PSO2) (PO1)
C303.2	To understand and implement imperative programming paradigm through object-oriented constructs. (PSO2) (PO1)
C303.3	To understand and implement declarative programming paradigm through functional programming (PSO2) (PO1, PO5)
C303.4	To understand, formulate and implement declarative programming paradigm through logic programming (PSO2) (PO1, PO5)
C303.5	To understand alternative paradigm through concurrent programming fundamentals and design, develop applications based on declarative paradigm (PSO2) (PO1, PO2)
C303.6	To understand alternative paradigm through scripting languages and formulate applications based on real life applications (PSO2, PSO4) (PO1, PO2)

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