VSIT | Vidyalankar School of Information Technology

INDUCTION

PROGRAM: B.Sc.IT
SEMESTER: IV
SUBJECT: Core Java
SUBJECT CODE: USIT401
FACULTY: Ms. Seema Murkar
Ms. Ketaki Ghawali

LEARNING OUTCOMES

BRIEF INTRODUCTION OF THE SUBJECT

TO LEARN ABOUT THE REAL - LIFE APPLICATIONS WHERE THE LANGUAGE IS USED

TO RECEIVE GUIDANCE ABOUT THE CAREER OPPORTUNITIES

TO UNDERSTAND THE SYLLABUS (THEORY+PRACTICAL)

TO UNDERSTAND THE NEW PRACTICAL FORMAT

WHAT IS JAVA?

WHERE DID JAVA COME FROM?

WHY JAVA?

What is Java?

Java is a general purpose, class based, object oriented programming language.

It is designed for having lesser implementation dependencies.

Computing platform for application development.

Video Link: https://youtu.be/DcQPtlFlgzY


Web Development
Continuous Testing
Java
Framework
Android
spring
Big Data

REAL LIFE APPLICATIONS

- OTT platforms such as Netflix
- E-Commerce applications such as eBay, Amazon
- Scientific Applications such as MATLAB
- Web Servers Applications such as Tomcat

CAREER OPPORTUNITIES

- Software Engineer
- Applied Scientist
- Senior Computer Programmer
- Software Architect
- DevOps specialist
- Scrum Master

SUBJECT TEACHERS

Ms. Seema Murkar
M.Sc. Comp. Sci.

Area of Expertise: Programming, Machine Learning

Ms. Ketaki Ghawali
M.Sc. IT

Area of Expertise: Programming, Databases

RESULTS

APRIL 2020	APRIL 2019
95%	90.05%

POLL

- Introduction and Data Types
- Control Flow Statements, Iterations and Classes
- Inheritance & Packages
- Enumerations, Arrays, Multithreading, Exceptions & Byte Streams
- GUI & Event Handling

Syllabus

UNIT I

Introduction

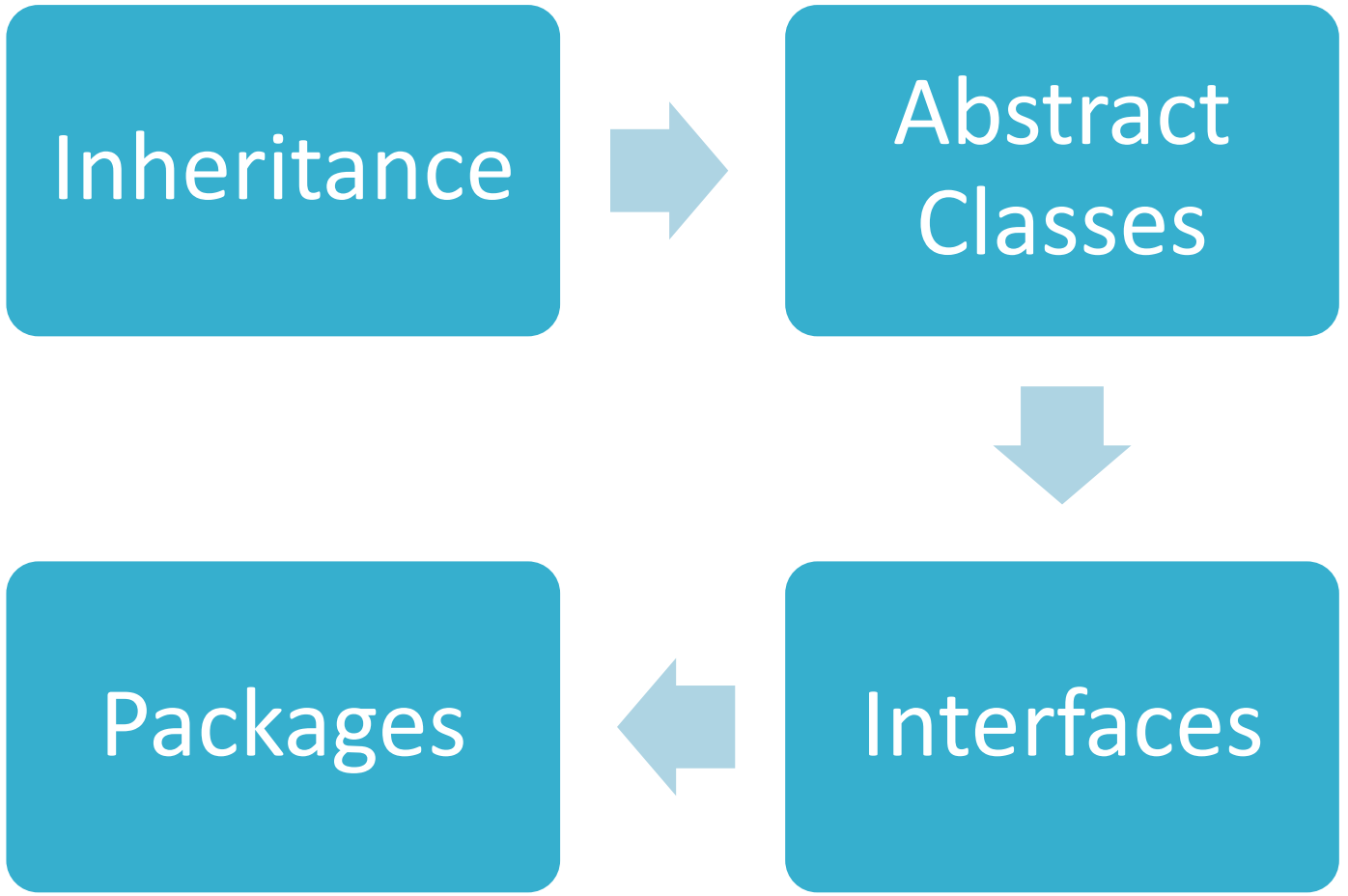
History, Features, Architecture

Data Types, Syntax

UNIT II

- Control Flow Statements
- Iterations
- Classes
- Variable Arguments
- Garbage Collection

UNIT III



UNIT IV

- Enumerations, Arrays
- Multithreading
- Exceptions
- Byte Streams

UNIT V

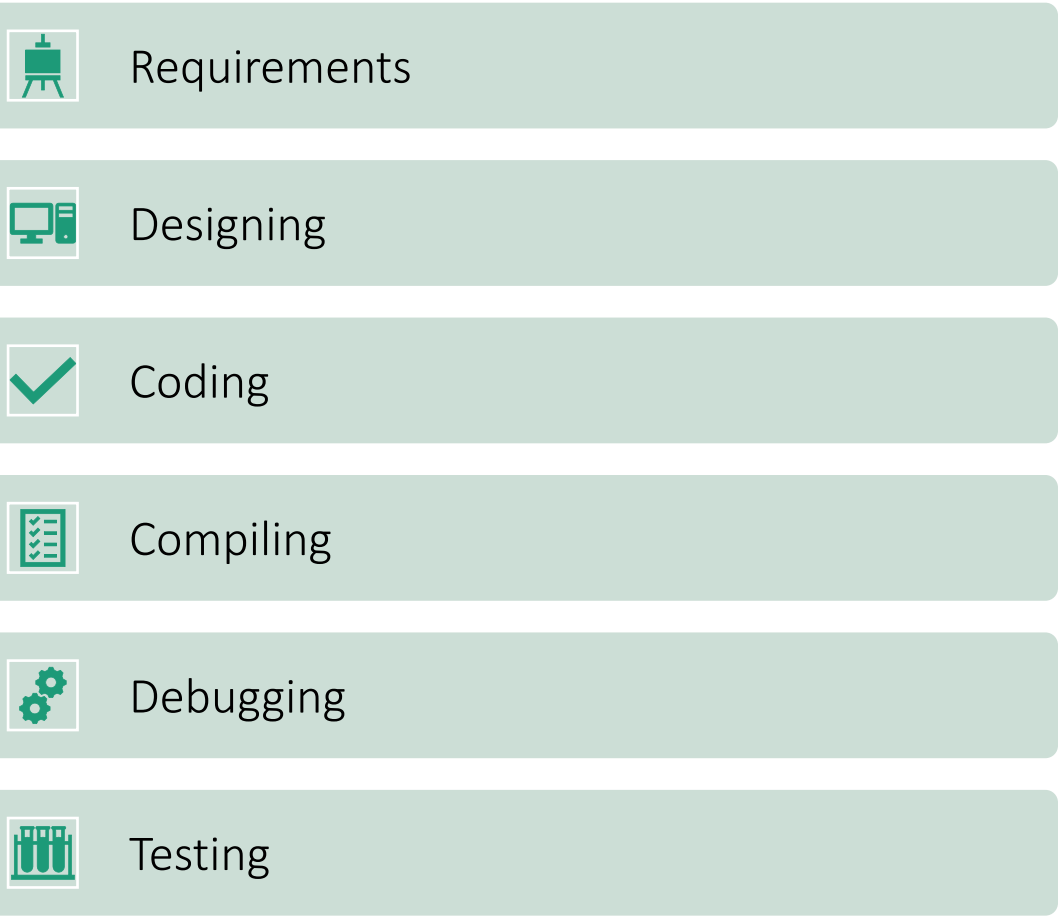
Abstract Window Toolkit

Layout

Event Handling

Arrange the following in a sequence for DEVELOPING A PRODUCT

- Designing
- Compiling
- Coding
- Requirements
- Testing
- Debugging



Writing a Program

-  Identifying the input
- Deciding on the type of data
- Understanding problem statement
- Creating multiple instances as per the requirement
- Binding all data and methods into single unit
- Defining functions to achieve the output.

Understanding	Understanding problem statement
Identifying	Identifying the input
Deciding	Deciding on the type of data
Defining	Defining functions to achieve the output.
Binding	Binding all data and methods into single unit
Creating	Creating multiple instances as per the requirement

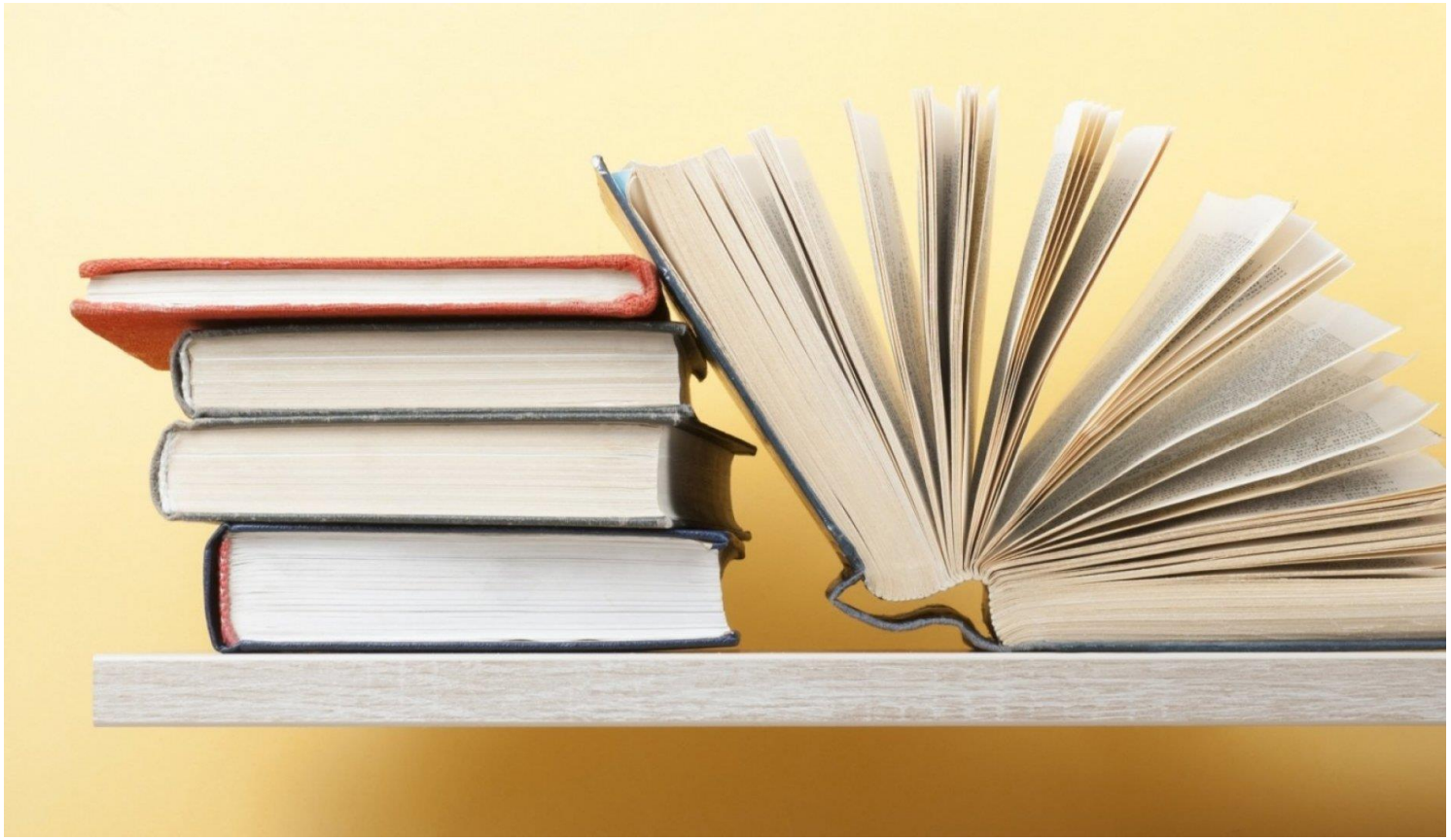
PRACTICALS

SR. NO	TITLE
1	Java Basics
2	Use of Operators, control flow statements
3	Classes
4	Method Overriding
5	Methods, Packages
6	Arrays
7	Exception Handling, Use of Runnable and Thread
8	AWT
9	Lambda Expressions
10	GUI Application to Schedule Appointments

PRACTICAL ASSESSMENT

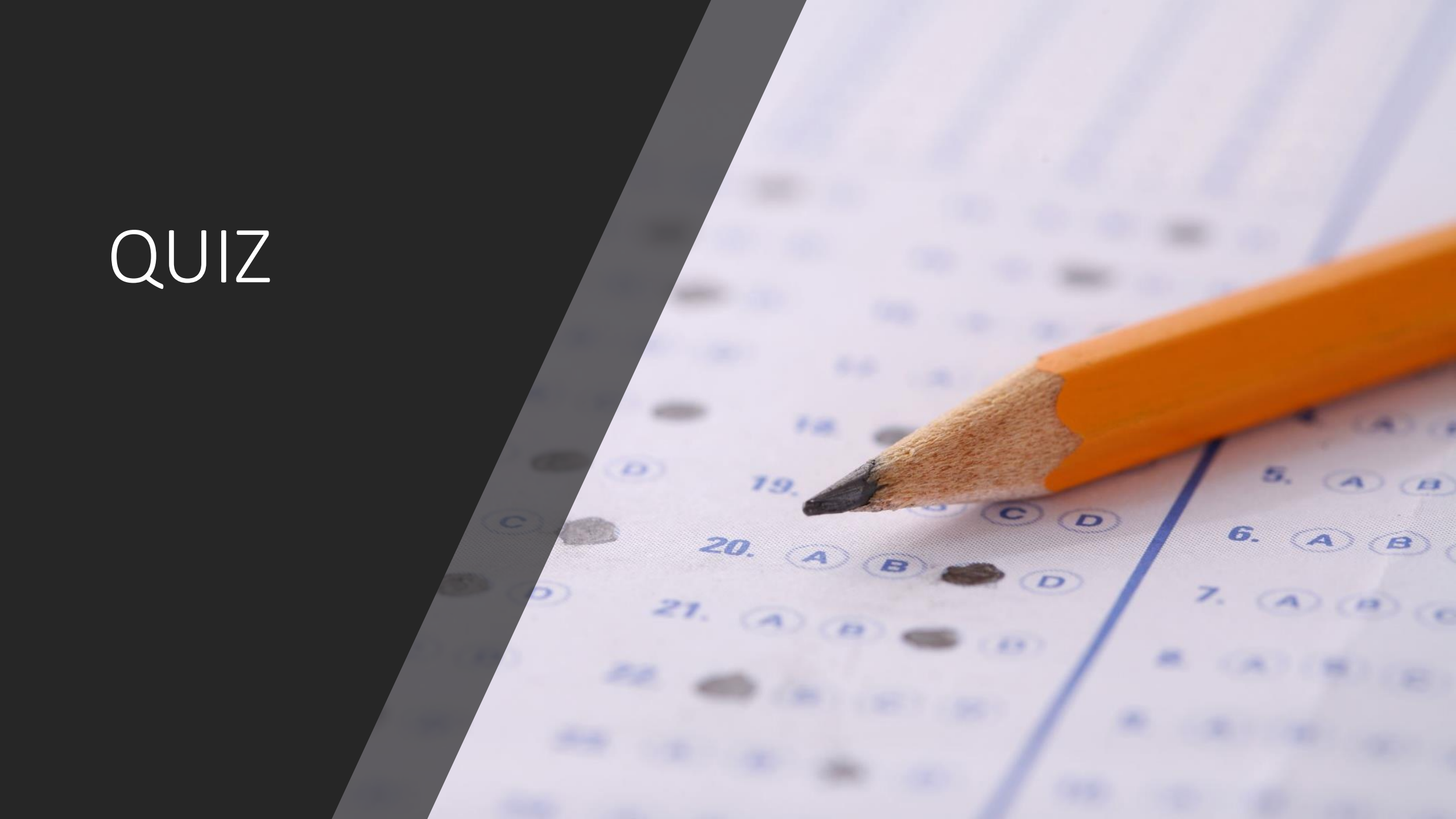
- Total 50 marks
- Practical assessment will be done during every practical. (10 marks)
- Total marks at the end of 10 practicals =100marks (this will be scaled down to 20)
- Mid Practical Test will be conducted for 10 marks.
- Final Practical Exam will be of 20 marks. (Artifact submission)
- **IMPORTANT NOTICE**: No question bank will be given for practical exam

Reference Books



- **Java: The Complete Reference,** Herbert Schildt
- **Programming With Java: A Primer,** Balagurusamy
- **Murach's Beginning Java with NetBeans**, Joel Murach, Michael Urban
- **Core Java, Volume I: Fundamentals**, Hortsman
- **Core Java, Volume II: Advanced Features**, Gary Cornell, Hortsman
- **Core Java: An Integrated Approach,** R. Nageswara Rao

QUIZ



Take Home Task

Revise the basic programming concepts.


Thank you!