Vidyavardhini's College of Engineering and Technology

Department of Artificial Intelligence & Data Science

AY: 2024-25

Class:	SE	Semester:	III
Course Code:		Course Name:	object oriented Programming JAVA.

Name of Student:	Atharva. V. Bose
Roll No. :	07.
Assignment No.:	01
Title of Assignment:	
Date of Submission:	
Date of Correction:	

Evaluation

Performance Indicator	Max. Marks	Marks Obtained
Completeness	5	
Demonstrated Knowledge	3	
Legibility	2	
Total	10	

Performance Indicator	Exceed Expectations (EE)	Meet Expectations (ME)	Below Expectations (BE)
Completeness	5	3-4	1-2
Demonstrated Knowledge Legibility	3	2	1
Legibility	2	1	0

Checked by

Name of Faculty   :

Signature   :

Date   :

Java

ASSIGNMENT-01

91)

feature	OOP	POP
1) concept	Based on object (instance of classes) that contain data and method.	Based on Procedure or roundine the operate an data
2) principle	Ecapsulation, Abstracts, Enheritance, poly-merophism	fo ces or function and procedure to manipulate data
3) structure	Organized around object and classes.	arganized into procedure or function
4) Data and functionality.	data methods are bundled together within classes.	Data and function are seprated.
5) Reusability.	supports code reuse through inheritance & polymorphism.	Relies on moduler function for reuse
6) Complexity	suited for complex system with inheritced components.	suited for simple, leaaar task 8 application
7) Examples of languages.	Java, C++, python etc	C etc.

FOR EDUCATIONAL USE

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Q2) Java, is a widely used versatile programming language that is designed to have a variety of a features to enhance its functionally and efficiency.

feature of Java.

1) Object oriented: Java follows the object oriented programming prarodigm, which encourges code reusability

2) Platform Independent: Java code is compiled into byte code which can be executed orany platform that has a Juvm

3) Simple: Java has a straight forwared syntem similar to C++, but with fewer complex feature such as painters and operator overloading

④ Secure: Java provides a secure environment for developing applications through its build in security features

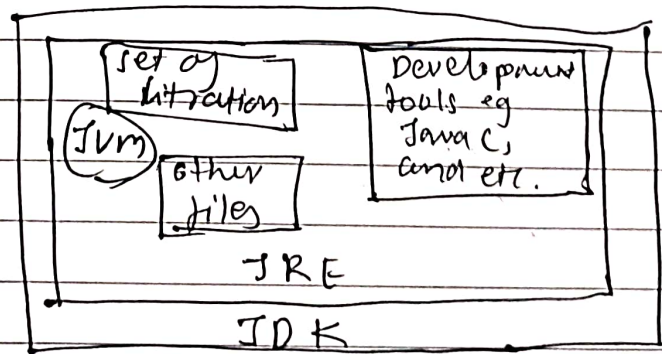⑤ High performance: Java achieves high performance through the use of Just-In complication

Q2) Role of JVM:

The Java virtual machine is a crucial component of the Java runtime Environment reponsible for executing Java byte by the code here's a breakdown of this role.

1) Execution of byte code: The JVM interprets are execute, Java bytecode, which is platform Independent, alform Java programs to run on any device with a compatible JVM.

2) Memory management: The JVM handles memory allocation and deallocation through is build in garbage collector.

3) <u>Security</u>: The JVM provides a secure execution environment by inforcing strict runtime chill and security police

Diagram

set of libraration	Developmnt touls eg
JVm	Java c,
other files	and etc.

JRE

JDK

Q3)

i) Age i's year → Data type : Intger

ii) Rate of Intrest → Datatype : Float

iii) Area of circule → Datatype : float

iv) Runs mode by batsman → datatyp : Intreger

V) User input as true or false → datatype : Boolen