

Day 1

Assignment 4.

Date 27 / 1 / 2023 .

Page

Q.1] What is statically typed and dynamically typed programming language?

⇒ These are two main differences between dynamic typing and static typing that you should be aware of when writing transformation scripts.

① Dynamically Typed languages perform type checking at runtime, while

② statically typed languages perform type checking at a compile time

Q.2] What is the variable in Java?

⇒ variable are containers for storing data values.

In Java, there are three types variable.

① local

② instance

③ static

Ex. String → stores text such as "Hello!"

String value are surrounded by double quote.

int → stores integers (whole number)

without decimal.

123 or -123.

Q. 3] How to Assign a value To variable ?

⇒ Assign a value

type variableName = value;

type is one of the Java typed
(such as int or string) and
variableName is the name of the
variable (such as x or name).
The equal sign is used to assign
value to the variable.

ex. String name = "John";
System.out.println(name);

② int myNum = 15;
System.out.println(myNum);

Q.4] What are primitive datatype in Java ?

⇒ primitive datatype Specify the size and type of variable value. They are the building blocks of data manipulation and cannot be further divided into simpler data.

8 Types of primitive data.

Data Type	Size	Description
-----------	------	-------------

① byte	1 byte	-128 to 127
--------	--------	-------------

② short	2 byte	-32,768 to 32,767
---------	--------	-------------------

③ int	4 byte	-2,147,483,648 to 2,147,483,647
-------	--------	---------------------------------

④ long	8 byte	-n to n
--------	--------	---------

⑤ float	4 byte	6 to 7 decimal digit
---------	--------	----------------------

⑥ double	8 byte	15 decimal digit
----------	--------	------------------

⑦ boolean	1 bit	True or False
-----------	-------	---------------

⑧ char	2 bytes	single character or ASCII value
--------	---------	---------------------------------

Q.5) What are the identifiers in Java.

⇒. Identifier in Java are name that distinguish between different Java entities such as classes, method variable of packages. Identifiers include the names of classes method. These identifiers are each specified using a syntax of naming scheme.

Q.6] List the operation in Java.

⇒. Java use many operators.

- ① unary operator → postfix / prefix.
- ② Arithmetic operator → +, -, %, *
- ③ Shift operator → < >
- ④ Relational operator → < >, <= >=
- ⑤ Bitwise op. → &, ^, ||
- ⑥ logical operator → &&, ||
- ⑦ Ternary operator → ?
- ⑧ Assignment operator → =, +=, -=, *=, /=, >>=

Q.7] Explain about increment & decrement operator and give an Example - ?

→ The increment (+) and decrement (-) are special type of operators used in programming languages to increment and decrement the value of the given variable.

① Increment operator is used to increment the value of variable in expression. pre increment the value is first incremented and then used inside the expression whereas the post increment the value.

ex $++$

② Decrement operator $--$ it is used to decrement the value of a variable in an expression. pre decrement the value is first decremented and then used inside the expression whereas the post decrement the value.

ex. $--$