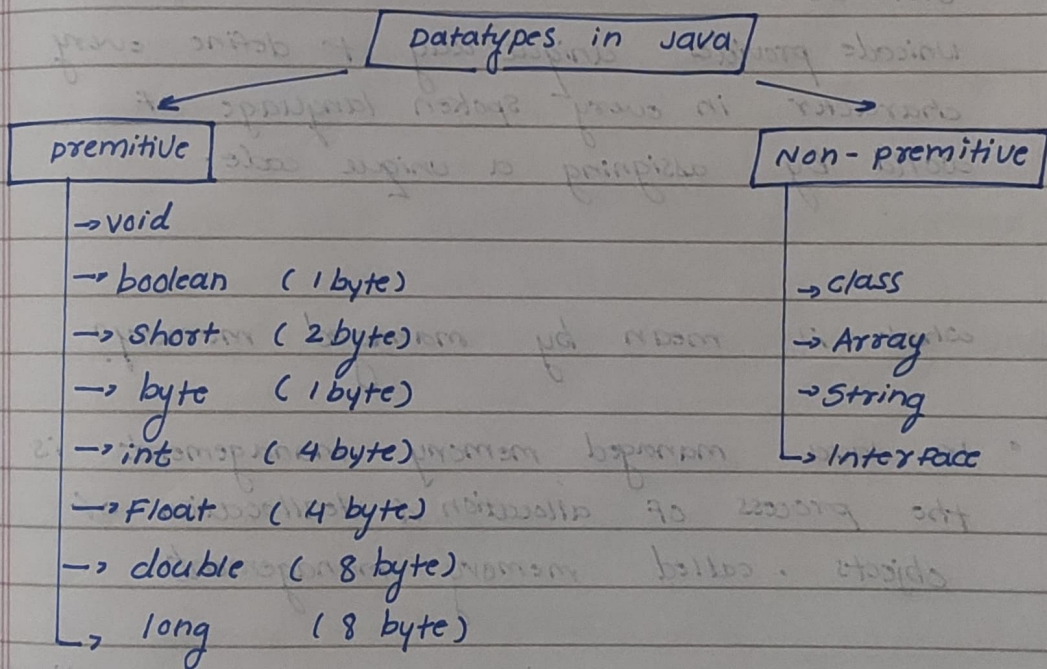


Assignment - 24

Q.1 What are the datatypes in Java?

• Two types of datatypes are there in Java :

- 1) primitive
- 2) Non-primitive



Q.2. Why size of all datatypes in Java on all platforms & all architectures is same?

- Because Java uses JVM for execution of program.
- When we download JDK (Java Development Kit) it is same for all operating systems & architectures.

Q.3 what is the use of UNICODE system as compared to ASCII?

- Unicode and ASCII are most popular encoding standards that are used all over world.
- ASCII : (American Standard Code for Info. Interchange)
It is character encoding standard for electronic standard.
- UNICODE :
Unicode provides unique way to define every character in every spoken language of world by assigning a unique code.

Q.4 what is mean by managed memory?

- In Java managed memory management is the process of allocation & deallocation of objects, called memory management.
- Java does memory management automatically using Java garbage collector.
- As Java JVM has limited memory so, the memory should be used efficiently.
For this Java uses concept of managed memory.
- Two major parts of Memory management:
 1. Java virtual m/c memory structure.
 2. working Garbage collector.

Q5 what are different characteristics & behaviours in java?

• There are two types of Data members: characteristics,

1. Instance or non-static data members
2. Static data members (class variables)

1. Instance :

- Memory will be allocated each & every time when ever an object is created.

- These variables can be accessed through object name.

2. Static data members: (class data members) :

- Memory will be allocated only once.

- These variable must be accessed by class name.

• Behaviour :

1. Instance Method

2. Class Method (static)

• Instance Method : used for repetitive task.

• Class Method : used for non-repetitive task.

Q6 Explain prototype of main function of Java.

```
class Demo {  
  
    public static void main (String amkar[]) {  
        System.out.println ( "Jay Shriuray" );  
    }  
}
```

1. class : Non-primitive datatype in Java, as Java is pure object oriented everything ~~was~~ written in Java inside the class.
2. Demo : It is name of class.
Class name always start with capital letters.
The name of class & the name of file should be same.
3. public : It is a access specifier which indicates that anyone can access main method.
4. static : The main method is static so, JVM will call this method without creating object of it.

5. void : It returns nothing so the return value of main function is void.
6. main : The name of entry point function.
7. args [] : It is a array which accepts the command line arguments.
8. String : Non-primitive datatype in java. array of characters.
9. System : It is a name of inbuilt class in java from java.lang package.
10. out : It is a member of output device (console).
11. println : which displays the output on screen.

Q7. What are the types of loops in java.

3 major types of loops in java:

1. for loop
2. while loop
3. do-while loop

Q. 8 How create object in java?

- Java is dynamic programming language so everything in Java is done at runtime.

- We can allocate memory in Java using new keyword.

- Using new keyword we can create the object of class.

Syntax :

```
classname object = new classname();
```

e.g.

```
Demo obj = new Demo();
```

We can call the members of class using object and dot (.) operator.

for eg. `obj.fun();`

Q. 10.

What is meant by object reference in Java?

- Object reference means giving just the another name to object.

- The another name will hold the address of the object (i.e. #code) & stored at symbol table.

- So we can call the members of class using another name of that object.

Q.9. What are the types of array in Java?

- Array is a collection of homogeneous data in sequential manner.
- There are two major types of array in Java:
 1. Single Dimensional array
 2. Multipdimensional array

1. Single Dimensional array:

It is a type of array in which the data is store sequentially in linear way.

e.g. Arr

--	--	--	--

2. Multi-Dimensional array:

It is type of array in which data stored in matrix format. (row & columns).

	0	1	2	3	
0					} rows
1					
2					
3					
	columns				

- Jagged array : It is multidimensional array in which each row has different number of columns.

	0	1	2	3
0	10	20	30	40
1	50	60		
2	70	80	90	
3	100			

Arr [][] = { {10, 20, 30, 40}, {50, 60}, {70, 80, 90}, {100} } ;