

FULL STACK DEVELOPMENT – WORKSHEET 3

Q1. Which one of the following is not a Java feature?

Answer: B. Use of pointers

Q2. Which of these cannot be used for a variable name in Java?

Answer: C. keyword

Q3. Which of the following is a superclass of every class in Java?

Answer: C. Object class

Q4. Which one is a valid declaration of a boolean?

Answer: C. boolean b3 = false;

Q5. Which is the modifier when there is none mentioned explicitly?

Answer: D. default

Q6. All the variables of interface should be?

Answer: C. public, static and final

Q7. Which of these data types is used to store command line arguments?

Answer: A. Array

Q8. How many arguments can be passed to main()?

Answer: A. Infinite

Q9. What will be the output of the following Java program, Command line execution is done as – “java Output This is a command Line”?

```
class Output
{
    public static void main(String args[])
    {
        System.out.print(args[0]);
    }
}
```

Answer: A. java

```
PS C:\Users\suhai\OneDrive\JavaPractice Session\PracticeSession\src> javac mod1.java
PS C:\Users\suhai\OneDrive\JavaPractice Session\PracticeSession\src> java mod1
java Output This is a command Line
PS C:\Users\suhai\OneDrive\JavaPractice Session\PracticeSession\src> █
```

Q10. What is the value of “d” in the following Java code snippet?

`double d = Math.round (2.5 + Math.random());`

Answer: B. 3

Q11. Which of these methods is a rounding function of Math class?

Answer: D. all of the mentioned

Q12. Standard output variable 'out' is defined in which class?

Answer: D. System

Q13. What will be the output of the following Java program?

```
class main_class
{
    public static void main(String args[])
    {
        int x = 9;
        if (x == 9)
        {
            int x = 8;
            System.out.println(x);
        }
    }
}
```

Answer: C. Compilation error (As we are re-declaring the 'x' variable that is already declared and defined in main method)

Q14. Which of these is the method which is executed first before execution of any other thing takes place in a program?

Answer: B. static method (because a static method invokes when the class is loaded. It does not require any object to be invoked)

Q15. Which of these can be used to differentiate two or more methods having the same name?

Answer: D. All of the mentioned

Q16. What will be the output of the following Java program?

```
class Output
{
    static void main(String args[])
    {
        int x , y = 1;
        x = 10;
        if(x != 10 && x / 0 == 0)
            System.out.println(y);
        else
            System.out.println(++y);
    }
}
```

Answer: B. 2 (As the if condition fails, y is incremented first and then printed with value 2)

Q17.What will be the output of the following Java program?

```
class area
{
    int width;
    int length;
    int height;
    area()
    {
        width = 5;
        length = 6;
        height = 1;
    }
    void volume()
    {
        volume = width * height * length;
    }
}
class cons_method
{
    public static void main(String args[])
    {
        area obj = new area();
        obj.volume();
        System.out.println(obj.volume);
    }
}
```

Answer: D. 30

Q18. Write Syntax to create/define java methods.

Answer:

Syntax:

```
<accessSpecifier> <returnType> <methodName> (arguments) {
    //block of code;
}
```

Example:

```
public int sum (int a, int b) {
    int sum= a + b;
    return sum;
}
```

Q19. Write a java program following instructions

A. Make a class Addition

a. initialize sum as 0

b. make addTwoInt method taking two int parameters a,b. make sum = a+b.

Return Sum

B. define class as Method Call. Define main method

a. Create object of class Addition

b. call method using instance of object

c. Print sum

Answer:

```
import java.util.*;
class Addition {
    int sum=0;
    public int addTwoInt(int a, int b) {
        sum = a + b;
        return sum;
    }
}

public class MethodCall {
    public static void main(String[] args) {
        try (Scanner input = new Scanner(System.in)) {
            int a, b;
            int sum;
            System.out.println("Enter the value of a");
            a= input.nextInt();
            System.out.println("Enter the value of b");
            b= input.nextInt();
            Addition obj = new Addition();
            sum = obj.addTwoInt(a, b);
            System.out.println("The sum of provided two integers is: "+sum);
        }
    }
}
```

Output:

```
PowerShell 7.3.4
PS C:\Users\suhai\OneDrive\JavaPracticeSession\PracticeSession> & 'C:\Program Files\Java\jdk-20\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\suhai\OneDrive\JavaPracticeSession\PracticeSession\bin' 'MethodCall'
Enter the value of a
10
Enter the value of b
20
The sum of provided two integers is: 30
```

Q20. Write a java program following instructions

A. Define a class Example

- a. Define two instance variables number and name
- b. Define accessor (getter) methods
- c. Define mutator (setter) methods
- d. define method printDetails —> print name and number

B. Define public class Demo (Main Class)

- a. Define main method
- b. Make Instance/object of example class
- c. set number and name using instance created as 123 and Your name.
- d. call printDetails method using instance

Answer:

```
class Example {
    private int number;
    private String name;
    public void setNumber(int number) {
        this.number= number;
    }
    public void setName(String name) {
        this.name= name;
    }
    public int getNumber() {
        return number;
    }
    public String getName() {
        return name;
    }
}

public class Demo {
    public static void main(String[] args) {
        Example obj= new Example();
        obj.setNumber(10);
        obj.setName("Suhail Ahmed");
        int number= obj.getNumber();
        String name= obj.getName();
        System.out.println("The number sent in argument is: "+number);
        System.out.println("The name sent in argument is: "+name);
    }
}
```

Output:

```
PowerShell 7.3.4
PS C:\Users\suhai\OneDrive\JavaPracticeSession\PracticeSession> & 'C:\Program Files\Java\jdk-20\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\suhai\OneDrive\JavaPracticeSession\PracticeSession\bin' 'Demo'
The number sent in argument is: 10
The name sent in argument is: Suhail Ahmed
PS C:\Users\suhai\OneDrive\JavaPracticeSession\PracticeSession>
```