

FULL STACK DEVELOPMENT – WORKSHEET 3

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

- A. Object-oriented
- B. Use of pointers**
- C. Portable
- D. Dynamic and Extensible

Answer: Java do not use pointers because using pointer the memory are can be accessed, which is a security issue.

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

- A. identifier & keyword
- B. identifier
- C. keywords**
- D. none of the mentioned

Answer: In java Keywords are predefined words (reserved words), which have special meaning for compiler.

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

- A. ArrayList
- B. Abstract class
- C. Object class**
- D. String

Answer: The class named Object is the super class of every class in Java.

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

- A. boolean b1 = 1;
- B. boolean b2 = 'false';
- C. boolean b3 = false;**
- D. boolean b4 = 'true'

Answer: A boolean can only be assigned the literal true or false.

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

- A. protected
- B. private
- C. public
- D. default**

Q6.All the variables of interface should be?

- A. default and final
- B. default and static
- C. public, static and final**
- D. protect, static and final

Answer: Variables of an interface are public, static and final by default because the interfaces cannot be instantiated, final ensures the value assigned cannot be changed with the implementing class and public for it to be accessible by all the implementing classes.

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

- A. Array
- B. Stack
- C. String**
- D. Integer

Answer:All command Line arguments are passed as a string.

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

- A. Infinite**
- B. Only 1
- C. System Dependent
- D. None of the mentioned.

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]);
    }
}
```

- A. java**
- B. Output
- C. This
- D. is

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

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

- A. 2
- B. 3**
- C. 4
- D. 2.5

Answer: random() returns a double value with a positive sign, greater than or equal to 0.0 and less than 1.0. Returned values are chosen pseudorandomly with (approximately) uniform distribution from that range.

So max value of random() is 0.999

& Math.round() returns nearest interger value

Ex: if d=Math.round(4.999)=4 & d=Math.round(5)=5

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

d= Math.round(2.5+0.999);

d=Math.round(3.499)

d=3

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

- A. max()
- B. min()
- C. abs()
- D. all of the mentioned**

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

- A. Void
- B. Process
- C. Runtime
- 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);
        }
    }
}
```

- A. 9
- B. 8
- C. **Compilation error**
- D. Runtime error

Answer: Compilation error: Duplicate local variable

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

- A. **main method**
- B. static method
- C. private method
- D. finalize method

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

- A. Parameters data type
- B. Number of parameters
- C. Return type of method
- 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);
    }
}
```

- A. 1
- B. 2**
- C. Runtime Error
- D. Compilation Error

Answer: `if(x != 10 && x / 0 == 0)` , In this first `x!=10` this condition execute and as it is false else block is executed . As in Logical “And” Operator the statement will only true if both the condition are true after checking first condition as false it don't check second condition.

If Compiler checks both condition then there will be runtime error as we cannot divide any number by zero.

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);
    }
}
```

- A. 0
- B. 1
- C. 25
- D. 30**

Q18. Write Syntax to create/define java methods.

Answer: The syntax to declare a method is:

```
returnType methodName() {  
  
    // method body  
  
}
```

Here, **returnType** - It specifies what type of value a method returns For example if a method has an **int** return type then it returns an integer value. If the method does not return a value, its return type is **void** .

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

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