PULKIT SHARMA

WORKSHEET 3

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

ANSWER: (B) USE OF POINTER

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:[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]);}}done as

ANSWER: [C] THIS

Q10.What is the value of "d" in the following Java code snippet?double d = Math.round (2.5 + Math.random());

ANSWER: [C] 4

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: [B] 8

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

ANSWER: [A] MAIN METHOD

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

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);elseSystem.out.println(++y);}}

ANSWER: [C] RUNTIME ERROR

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: access_modifier return_type method_name(parameter_list) {

   // Method body

   // Statements to be executed when the method is called

   return return_value; // If the method has a return type

}

EXAMPLE- (1)

 public void printMessage() {

   System.out.println("Hello, world!");

}

EXAMPLE- (2)

public int add(int a, int b) {

   return a + b;

}

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

ANSWER: class Addition {

  int sum = 0; // Initializing sum as 0

  int addTwoInt(int a, int b) {

    sum = a + b; // Calculate sum of a and b

    return sum; // Return the sum

  }

}

public class Main {

  public static void main(String[] args) {

    Addition addition = new Addition(); // Creating an instance of the Addition class

    int number1 = 5;

    int number2 = 7;

    int result = addition.addTwoInt(number1, number2); // Calling the addTwoInt method

    System.out.println("Sum of " + number1 + " and " + number2 + " is: " + result); // Printing the 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: class Addition {

   int sum = 0; // Initializing sum as 0

   int addTwoInt(int a, int b) {

     sum = a + b; // Calculate sum of a and b

     return sum; // Return the sum

  }

}

public class MethodCall {

  public static void main(String[] args) {

    Addition addition = new Addition(); // Creating an instance of the Addition class

    int number1 = 5;

    int number2 = 7;

    int result = addition.addTwoInt(number1, number2); // Calling the addTwoInt method

    System.out.println("Sum of " + number1 + " and " + number2 + " is: " + result); // Printing the 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

ANSWER: class Example {

   private int number;

   private String name;

   // Accessor methods (getters)

   public int getNumber() {

      return number;

   }

   public String getName() {

      return name;

   }

   // Mutator methods (setters)

   public void setNumber(int number) {

      this.number = number;

   }

   public void setName(String name) {

      this.name = name;

   }

```java
    // Method to print details

    public void printDetails() {

        System.out.println("Name: " + name);

        System.out.println("Number: " + number);

    }

}


public class Main {

    public static void main(String[] args) {

        Example example = new Example(); // Creating an instance of the Example class


        example.setName("John");

        example.setNumber(42);


        example.printDetails(); // Calling the printDetails method

    }

}
```

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;

```java
    // Accessor methods (getters)

    public int getNumber() {

        return number;

    }


    public String getName() {

        return name;

    }


    // Mutator methods (setters)

    public void setNumber(int number) {

        this.number = number;

    }


    public void setName(String name) {

        this.name = name;

    }


    // Method to print details

    public void printDetails() {

        System.out.println("Name: " + name);

        System.out.println("Number: " + number);

    }

}


public class Demo {
```

```java
    public static void main(String[] args) {

        Example example = new Example(); // Creating an instance of the Example class


        example.setName("Your name");

        example.setNumber(123);


        example.printDetails(); // Calling the printDetails method
    }
}
```