WORKSHEET-2

Q1. .Java method overloading implements the OOPS concept

Sol. Polymorphism

Q2.Data members and member functions of a class are private by default.

Sol. False

Q3. Data members and member functions of a class are private by default.

Sol. All

Q4. Identify the feature, which is used to reduce the use of nested classes.

Sol. Binding

Q5. .Which concept of Java is achieved by combining methods and attributes into a class?

Sol. Encapsulation

Q6. .Which of the following declarations does not

compile?

Sol. int num1,num2=0;

Q7.Which of these interface must contain a unique element?

Sol. Set

Q8.Predict the output?

```java
package main;

 class T {

 int t = 20;

 }

 class Main {

 public static void main(String args[]) {

 T t1 = new T();

 System.out.println(t1.t);

 }

 }
```

Sol. The output of the code will be:

20

Q9. What is the output of the below Java program?

```java
//bingo.java file
public class Hello
{
 public static void main(String[] args)
 {
 System.out.println("BINGO");
 }
 }
```

Sol. The output will be :

BINGO

Q10.What will be the output of the following Java program?

```java
Class  variable_scope
```

```java
{
public static void main(String args[])
{
int x;
x = 5;
{
int y = 6;
System.out.print(x + " " + y);
}
System.out.println(x + " " + y);
}
}
```

Sol. Compilation Error

Q11.What will be the output of the following Java code?

class String_demo

```java
{
public static void main(String args[])
{
char chars[] = {'a', 'b', 'c'};
String s = new String(chars); System.out.println(s);
}
}
```

Sol. abc

Q12. What will be the output of the following Java program?

```java
final class A
{
int i;
}
class B extends A
{
```

```
    int j;

    System.out.println(j + " " + i);

}

 class inheritance

 {

 public static void main(String args[])

  {

  B obj = new B();

  obj.display();

  }

  }
```

Sol. Compilation Error

Q13.What is output of following program public class Test

{

```java
public int getData() //getdata() 1

{

return 0;

}

public long getData() //getdata 2

{

return 1;

}

public static void main(String[] args)

{

Test obj = new Test();
System.out.println(obj.getData());

}

}
```

Sol. Compilation Error

Q14. What is the output of the following program?

```java
public class Test{
static int start = 2;
final int end;
public Test(int x) {
x = 4;
end = x;
}
public void fly(int distance) { System.out.println(end-
start+" "); System.out.println(distance);
}
public static void main(String []args){
new Test(10).fly(5);
}
}
```

Sol. [2 5]

Q15.What is the output of the following program?

```java
String john = "john";
```

```java
String jon = new String(john);
System.out.println((john==jon) + " "+
(john.equals(jon)));
```

Sol. true false

Q16. Given that Student is a class, how many reference variables and objects are created by the following code?

```java
Student studentName, studentId; studentName =
new Student(); Student stud_class = new Student();
```

Sol. Three reference variables and two objects are created

Q17. Write a java program to check even or odd number.

Sol.
```java
import java.util.Scanner;
public class EvenOdd {
public static void main(String[] args) {
Scanner reader = new Scanner(System.in);
```

```java
System.out.print("Enter a number: ");

int num = reader.nextInt();

if(num % 2 == 0)

System.out.println(num + " is even");

else

System.out.println(num + "isodd");

}

}
```

Q18. Write a java program to find average of two numbers.

Sol.
```java
import java.util.Scanner;
public class Average
{
    public static void main(String[] args)
    {
        Scanner input=new Scanner(System.in);
        double a,b,avg;
        System.out.print("Enter first number: ");
        a=input.nextDouble();
```

```java
        System.out.print("Enter second number: ");
        b=input.nextDouble();
        avg=(a+b)/2;
        System.out.println("The average of "+a+" and
"+b+" is "+avg);
    }
}
```

Q19. Write a java program to swap two numbers.

Sol.
```java
import java.util.*;

class Swap_With {
    public static void main(String[] args) {
        int x, y, t;// x and y are to swap
        Scanner sc = new Scanner(System.in);

System.out.println("Enter the value of X and Y");
        x = sc.nextInt();
        y = sc.nextInt();
System.out.println("before swapping numbers: "+x +"
 "+ y);
        /*swapping */
        t = x;
        x = y;
```

```
        y = t;
System.out.println("After swapping: "+x +"   " + y);
        System.out.println( );
    }
    }
```

Q20. Write a java program to check whether a number is prime or not.

Sol. .public class PrimeExample{

```
 Public static void main(String args[]){

   Int i,m=0,flag=0;

   Int n=3;//it is the number to be checked

   M=n/2;

   If(n==0||n==1){

    System.out.println(n+" is not prime number");

   }else{

    For(i=2;i<=m;i++){

     If(n%i==0){
```

```java
System.out.println(n+" is not prime number");

Flag=1;

Break;

 }

 }

If(flag==0)  { System.out.println(n+" is prime
number"); }

}//end of else

}

}
```

Q21. Write a java program to find table of n.

```java
Sol. import java.util.Scanner;
public class TableExample
{
public static void main(String args[])
{
Scanner sc = new Scanner(System.in);
System.out.print("Enter number: ");
//reading a number whose table is to be print
```

```java
int num=sc.nextInt();
//
loop start execution form and execute until the condi
tion i<=10 becomes false
for(int i=1; i <= 10; i++)
{
//prints table of the entered number
    System.out.println(num+" * "+i+" = "+num*i)
}
}
```

Q22. Write a java program to find the largest of three numbers.

Sol. import java.util.Scanner;

```java
public class CodesCracker
{
  public static void main(String[] args)
  {
     int a, b, c, large;
     Scanner scan = new Scanner(System.in);
```

```java
        System.out.print("Enter the First Number: ");
        a = scan.nextInt();
System.out.print("Enter the Second Number: ");
        b = scan.nextInt();
        System.out.print("Enter the Third Number: ");
        c = scan.nextInt();

        if(a>b && a>c)
            large = a;
        else if(b>a && b>c)
            large = b;
        else
            large = c;

        System.out.println("\nLargest = " +large);
    }
}
```

Q23. Write a java program to calculate Simple Interest

```java
public class Main
{
    public static void main (String args[])
    {   float p, r,  t,  si;
```

```java
        p = 13000;  r = 12; t = 2;
         si  = (p*r*t)/100;
    System.out.println("Simple Interest is: " +si);
   }
}
```

Q24. Write a java program to calculate Area and perimeter of Rectangle.

Sol.
```java
import java.util.Scanner;

public class Area_Perimeter

{

public static void main(String[] args)

{

int l, b, perimeter, area;

Scanner s = new Scanner(System.in);

 System.out.print("Enter length of rectangle:");

   l = s.nextInt();

 System.out.print("Enter breadth of rectangle:");
```

```java
b = s.nextInt()

 perimeter = 2 * (l + b);

System.out.println("Perimeter of
rectangle:"+perimeter);

     area = l * b;

System.out.println("Area of rectangle:"+area);

  }

}
```

Q25. Write a java program to check whether character is vowel or consonant.

```java
Sol. import java.util.Scanner;

public class VowelOrConsonant {

  public static void main(String args[]){

    System.out.println("Enter a character :");

    Scanner sc = new Scanner(System.in);

    char ch = sc.next().charAt(0);
```

```java
    if(ch == 'a'|| ch == 'e'|| ch == 'i' ||ch == 'o' ||ch ==
'u'||ch == ' '){

        System.out.println("Given character is an
vowel");

    }else{

        System.out.println("Given character is a
consonant");

    }

  }

}
```