01.Is java a 100% object oriented language?

02. What are the default or implicitly assigned values for data types in java?

03. State whether following code correct or wrong;

```
if(myNumber>10)
        System.out.println("your number is greater than 10.");
else
        System.out.println("your number is less than 10.");
```

04. What will be the output?

```
int  a = 9;
if(a<10){
   a++;
}else{
   a- -;
}
System.out.println(a);
```

05. What will be the result stored in x after evaluating the following expression?

```
Int x= 4;
X += (x++) + (++x) + x; // ans x =20;
```

06.what are wrapper classes in java programming language?

07. How does Java programming language pass primitive variables to methods - by value or by reference?

08.what will be the output?

```
public Test{
        public static void main (String[] argos){

                boolean a = false;

                if(a== false){
                        System.out.println("false");
                }else{
                        System.out.println("true");
```

```
            }
        }
    }
```

09. What happens when we forget to put a break statement in a case clause of a switch?

```
int yourNumber= 2;

switch(yourNumber){
        case 1:
                System.out.println("one"); break;
        case 2:
                System.out.println("two"); break;
        case 3:
                System.out.println("three"); break;
        case 4:
                System.out.println("four"); break;
}
```

10. How can you exit anticipatedly from a loop?

11. What types of loops java support?

12. What are the selection statements and jump statements?

13. When does autoboxing and unboxing occur in java?

14. What loop should we use if something needs to be executed without considering the condition? And explain why?

15. Draw the output pattern

```
        for(int i=0; i<=3;i++){
                for(int k=0; k<=3;k++){
                        System.out.print("* ");
                }
                System.out.println();
        }
```

16.
```
class DemoTest {
   public static void main(String args[]) {
```

```
    int x = 5;
    int y = 10;
  }
}
```
Swap values as x=10 & y=5 without using any other variables.

17. Write is the correct method declaration? Give reason for illegal declaration.
a. public static void myMethod() { } ;
b. public static void main() { }
c. public void static subMethod( );
d. public static void () { }
e. public static void_();
f. public static void _(){}
g. public static void myMethod(int x;){ }
h. public static void myMethod(x) { }
i. public static void myNewMethod(100) { }
j. public static void m(int a){return 0;}
k. public static void m1(){return;}
l. public static int me(int a){return 0;}

18. Write a program to print numbers from 1 to 10. Line by line

19.
```
class Example{
  public static void main(String args[]){
        //code here
  }
}
```
Print
Xxy
Y
X
Using 5 lines

20.Which line will occur a compile error and give the acceptable reason for error.

```java
Import java.util.*;
class Example {
  public static void main(String args[]) {
    Random r = new Random();
    getNumbers(); //Line 1
    int x = getNumbers(10); //Line 2
    getTotal(100, 10.0); //Line 3
    int total = getTotal(10.0, 100); //Line 4
  }

  public static int getNumbers() {
    Random r = new Random();//Line 5
    int x = r.nextInt(10); //Line 6
    int y = r.nextInt(5); //Line 7
    return x,y; //Line 8
  }

  public static int getNumbers(int x) {
    x = r.nextInt(x); //Line 9
    return x; //Line 10
  }

  public static int getTotal(int x, double d) {
    return x + d; //Line 11
  }

  public static double getTotal(double x, int d) {
    return x + d; //Line 12
  }
}
```

21.Write a program to calculate the sum of first 10 Natural numbers.

Print those patterns below using loops

22.

```
*
* *
* * *
* * * *
```

23.
```
* * * *
* * *
* *
*
```

24.
```
*  *  *  *
*  *  *  *
*  *  *  *
*  *  *  *
```

25.
```
class DemoTest {
  public static void main(String args[]) {
        int maths = 70;
        int science = 85;
        int english= 25;
        int geo = 50;
  }
}
```

If marks greater than 50 will show as "Pass"

26.
```
class DemoTest {
  public static void main(String args[]) {
        //your code here
  }
  public test(){
   System.out.print("Test 1");
  }
  public test(int x){
   System.out.print("Test 2");
  }
  public test(int x,int y){
   System.out.print("Test 3");
  }
}
```

Print "Test 3" by calling correct method

27.
```
class DemoTest {
  public static void main(String args[]) {
        //your code here
  }
  public test(){
   System.out.print("Test 1");
  }
  public test(int x, int y){
   System.out.print("Test 2");
  }
  public test(int x,String c){
   System.out.print("Test 3");
  }
}
```

Print "Test 3" by calling correct method

28.
```java
class DemoTest {
   public static void main(String args[]) {
        int maths = 70;
        int science = 85;
        int english= 25;
        int geo = 50;
   }
}
```

If marks>75 "A",marks >65 "marks>B", marks>55 "C",marks>35 "S",marks<35 "F"
Create program for above problem

29.Write a Java method to find out the sum of digit of a number input by user.

30. Write a Java method to get a Year from user input and find it is a leap year or not

31)Write the output of the program.

```java
public class t200
{
public static void main()
{
int i,n=5,s=0;
double f=0;
for(i=n;i>0;i–)
{
s=i*i;
f=(Math.pow(s,2))-i;
System.out.println(f);
}
}
}
```

Answer
620.0
252.0
78.0
14.0
0.0

32) Predict the output.
```
int a,b;
for (a=1; a<=2; a++)
{
for (b= (64+a); b<=70; b++)
System.out.print((char) b);
System.out.println( );
}
```

Answer
ABCDEF
BCDEF

33)What is the output of following code?

```
int x = 0;
while(x++ < 20) {
if(x%2 == 0)
System.out.println("Simply");
else if ( x==9)
break;
else
continue;
}
```

34)Convert the following segment into an equivalent do loop.
```
int x,c;
for (x=10, c=20; c>=10; c = c – 2)
x++;
```

35)Convert following do-while loop into for loop
```
int i=1;
int d=5;
do{
d=d*2
System.out.println(d);
i++;
}while(i<=5);
```

36) Write an infinite loop. An infinite loop never ends. Condition is always true.

37) Write a program to print all prime number in between 1 to 100.

38) Take 10 integers from keyboard using loop and print their average value on the screen.

39) Print multiplication table of 24, 50 and 29 using loop.

40) Take integer inputs from user until he/she presses q (Ask to press q to quit after every integer input). Print average and product of all numbers.

41)How do you check whether a string is a palindrome in Java?