

Worksheet

1. Give the output of the following code fragment.

(a) `int ch=10;`

`System.out.println(ch++);`

`System.out.println(++ch);`

`System.out.print(ch);`

(i) What output does the above code fragment produce?

(ii) What is the effect of replacing `++ch` with `ch+1`?

(b) `int val,res,n=1000;`

`res=(n+val)>1500?200:400;`

`System.out.println(res);`

(i) If the input is 400

(ii) If the input is 1000

(iii) If the input is 1500

2. What will be the result of the following two expressions if `i=15` initially?

(i) `++i<=15` (ii) `i++<=15`

3. Given the two following expressions:

(i) `a=4` (ii) `a==4`

(i) How are these two different?

(ii) What will be the result of the expression if the value of `a` is 6 initially?

4. Will the value of `y` be the same for the two cases given below if `x=42`?

(i) `y=++x;` (ii) `y=x++;`

5. Consider the following code snippet:

`int i=10;`

`int n=i++%5;`

What are the values of `i` and `n` after the code is executed?

6. What will be the value of `p=p*++j` where `j` is 22 and `p=3` initially?

7. What will be the result of the following expression

If (i) `age=25` (ii) `age=65` (iii) `age=85`

`age>65?350:100`

8. Develop an application that accepts principal amount, rate of interest and Time from the user then it computes the simple interest and displays it.

9. Design an application for four function calculator.

10. What is a character constant in Java? How are non graphic characters

represented in java?

11. Which of the following will produce a value of 22 if x=22.9?

(i) Math.ceil(x) (ii) Math.round(x)

(iii) Math.abs(x) (iv) Math.floor(x)

12. What is a “fall through”?

13. Give the output of the following code.

```
int m=100;
while(m>0)
{ if (m<10)
    break;
  m=m-10;
}
System.out.println("m is"+m);
```

14. Write a program to input a digit and print it in words.

15. Compare an if and? : operator.

16. Rewrite the following code fragment using switch.

```
if(ch=='E')
    eastern++;
if(ch=='W')
    western++;
if(ch=='N')
    northern++;
if(ch=='S')
    southern++;
else
    unknown++;
```