

1. **Explain escape sequences with the help of examples.**

An escape sequence is a sequence of keystrokes to escape being the code being interpreted in a specific way. So, as an example- “/n” is the escape sequence for interpreting a newline character- in context.

**Write the output of the following:**

2.

a. `int p=22, q=3;`

`System.out.println( (p/q) + (p%q)) ;`

The output would will be 8

b. `int x=0, y=10;`

`x+=y; 10`

`y+=x;10`

`System.out.println(x + y);`

The output is 30.

c. `int n=7;`

`System.out.println("n++" + (n++));`

`n++7`

`System.out.println("n = " + n);`

`n = 8`

3. **Differentiate between:**

i. `System.out.println` and `System.out.print`

“println” will print to the console and add an newline character at the end of the output. ‘print’ doesnt have this and will extend on that same line. So we need to pay attention to this.

ii. Increment operator and Decrement operator

Increment operator is ‘++’ and the decrement operator is ‘—’

iii. Type casting and automatic type conversion

Type casting is when we cast our info to a different data type from the original data type that we set up initially. Automatic type conversion is more of an accidental occurrence. This happen when information is mix with that of a different data type, the result is automatically converted to a another datatype.

4. **Integer and float data types:**

Integers are whole numbers, and float data type are floating point numbers- or numbers with a decimal point.

5. **Rewrite the following using ternary operator:**

i. if (a==10)  
    System.out.println(a\*b);  
  
    else  
  
    System.out.println(a/b);  
  
int ternary = (a==10) ? a\*b : a/b;  
System.out.println(ternary);

ii. if (a>b)  
    c=a;  
  
    else  
  
    c=b;  
  
(a>b) ? c=a : b=c;