1. A block of code is defined with the ( ) tokens.
    a. True
    b. False (Answer)

    Explanation: A block of code is defined with the { } tokens

2. What is the purpose of a semicolon(;) at the end of each line in Java?
    a. Looks Fancy
    b. We follow a convention
    c. Java is derived from C++; hence we use it as it is in C++
    d. To notify the compiler the end of each statement (Answer)

3. What is the data type of the value: 10?
    a. int (Answer)
    b. boolean
    c. double
    d. char

4. If x=10, y=20, then what will the following code display?
```
if (x>y){
   System.out.println("x is greater than y");
   }
else if(x==y){
   System.out.println({"x is equal to y");
   }
else{
   System.out.println("x is less than y");
   }
```
    a. x is greater than y
    b. x is equal to y
    c. x is less than y (Answer)
    d. None of the above

5. If x=10, y=20, then what will the following code display?
```
if (x>y){
   System.out.println("x is greater than y");
   }
if(x==y){
   System.out.println({"x is equal to y");
   }
if(x<y){
   System.out.println("x is less than y");
   }
```
    a. x is greater than y
    b. x is equal to y
    c. x is less than y (Answer)
    d. None of the above

6. Which of the following statements about the while loop is NOT true?
    a. Testing conditions are made before each iteration.
    b. The for loop can be duplicated using a while loop.
    c. The while loop is a post test loop. (Answer)

       Explanation: The while loop is not a post test loop as it checks the conditional statement before execution of the block of code not after.

7. Is this a valid loop (a loop without body of statements) : for (i=0; i<10; i++)
    a. Yes (Answer)
    b. No

       Explanation: In loop, body of statements is optional. The given loop without body, simply executes initialization, condition and increment statement 10 times.

8. Which of the following for loop is infinite?
    a. for (i=0; i<10; i++)
    b. for (i=4; i<=10; i++)
    c. for (i=-10; i<0; i++)
    d. for (i=10; i>0; i++) (Answer)

       Explanation: As the value of i is incrementing, so it will always be greater than zero and hence the loop will never exit.

9. while loops can not be nested.
    a. True
    b. False (Answer)

10. Which of the following while loop is infinite (let n = 10 initially)?
    a. while(n > 0){
            n = n-1;
       }
    b. while(n > 0){
            n = n+1;
        }

    c. while(n != 0){
            n = n-3;
       }

    d. while(n != 0){

```
                n = n+1;
                n = n-3;
            }
```

Primality Checking

1. The break statement is used to exit a loop.
   a. True
   b. False
2. How many times will the following loop run its body of statements?
   for (i=1; i<=100; i++) { /* body of statements */ }
   a. 101
   b. 100 (Answer)
   c. 99
   d. 98
3. How many times will the following loop run its body of statements?
   for (i=1; i*i<=100; i++) { /* body of statements */ }
   a. 11
   b. 10 (Answer)
   c. 9
   d. 8

Traverse on the digits of a number

1. For which of the following values of n, this code will not generate the count of   digits?
   ```
       int count = 1;
       while(n>=10){
               count++;
               n = n/10;
       }
   ```

   a. n = 123456
   b. n = -123456
   c. n = 0
   d. n = 615243