Quick Quiz!

Here is a quick quiz to check your understanding of Generics.

1 Which of the following is true about Generics?

2 Which keyword can be used in Generics?

3

What is the output of the following program?

```
class GetMax {
  public static <T extends Comparable<T>> T maximum (T a, T b)
  {
    if(a.compareTo(b) > 0)
      return a;
    else
      return b;
  }
  public static void main( String args[] )
  {
    System.out.println(maximum(4, 6));
    System.out.println(maximum(4.0, 6.1));
    System.out.println(maximum(4, 6.7));
  }
}
```

4

What is the output of the following program?

```
class Score <T>
{
   T value;
   public   int counter = 0;
   public   Score()  {counter++;}
   public   Score(T v) { value = v; counter++;}
};

class Main
{
  public static void main(String args[])
  {
    Score <Integer> x = new Score <Integer>();
    Score <Integer> y = new Score <Integer>();
    Score <Double> z = new Score <Double> ();

    System.out.println(x.counter);
    System.out.println(y.counter);
    System.out.println(z.counter);

  }
}
```

5

A generic class declaration looks like a non-generic class declaration, except that the class name is followed by a `type` parameter section.

6

With generic methods, the type parameter section of a generic class can NOT have one or more type parameters separated by commas.

7 What are the benefits of Generics in Java?

8

Generics can be used for more than one types defined in the form of comma separated list in the class / function header.

```
public static <A,B,T> void MultipleTypesFunction(A x, B y, C z)
{
    System.out.println( x + " is Type A");
  System.out.println( y + " is Type B");
    System.out.println( z + " is Type C");
}
```

Retake Quiz

In the next chapter, we will discuss array lists.