# Career Services Assignment 3 – Java Flash Cards

**Points possible:** 50

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| Category | Criteria | % of Grade |
| Completeness | All requirements of the assignment are complete. | 100 |

**Instructions:** Research common Java interview questions online and create 20 flash cards from the information you find. Study your flash cards regularly to better prepare for interviews. Fill out the table below with the information you put on each of your flash cards.

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| **Front of Card** | **Back of Card** |
| What are the 4 pillars of OOP? | Inheritance, Encapsulation, Polymorphism, and Abstraction |
| What is an Interface? | An interface is a template which has only method declarations and not the method implementation. |
| What is the meaning of Collections in Java? | Collection is a framework that is designed to store the objects and manipulate the design to store the objects. |
| What is the default value of the local variables? | The local variables are not initialized to any default value, neither primitives nor object references. |
| Does constructor return any value? | yes, the constructor implicitly returns the current instance of the class |
| Can we execute a program without main() method? | No |
| List any five features of Java? | List any five features of Java? |
| List two Java IDE’s? | Netbeans, Eclipse |
| Define class? | A class is a blue print from which individual objects are created. A class can contain fields and methods to describe the behavior of an object. |
| When a byte datatype is used? | This data type is used to save space in large arrays, mainly in place of integers, since a byte is four times smaller than an int. |
| What is a static variable? | Class variables also known as static variables are declared with the static keyword in a class, but outside a method, constructor or a block |
| What is protected access modifier? | Variables, methods and constructors which are declared protected in a superclass can be accessed only by the subclasses in other package or any class within the package of the protected members' class. |
| Why is String class considered immutable? | The String class is immutable, so that once it is created a String object cannot be changed. Since String is immutable it can safely be shared between many threads ,which is considered very important for multithreaded programming. |
| When parseInt() method can be used? | This method is used to get the primitive data type of a certain String. |
| Define Inheritance? | It is the process where one object acquires the properties of another. With the use of inheritance the information is made manageable in a hierarchical order. |
| What is Polymorphism? | Polymorphism is the ability of an object to take on many forms. The most common use of polymorphism in OOP occurs when a parent class reference is used to refer to a child class object. |
| What is Abstraction? | It refers to the ability to make a class abstract in OOP. It helps to reduce the complexity and also improves the maintainability of the system. |
| What is Encapsulation? | It is the technique of making the fields in a class private and providing access to the fields via public methods. If a field is declared private, it cannot be accessed by anyone outside the class, thereby hiding the fields within the class. Therefore encapsulation is also referred to as data hiding. |
| What is Method overloading? | If a class has multiple methods by same name but different parameters, it is known as Method Overloading. |
| List primitive Java types? | The eight primitive types are byte, char, short, int, long, float, double, and boolean. |