**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** |
| Four Pillars of OOP | Inheritance, Encapsulation, Polymorphism &  Abstraction |
| What is a Constructor? | A special method that is used to create an object of your class. It can be overloaded & it can have 0 parameters |
| What is a class? | A blueprint for an object. Classes have variables and methods. |
| What is an object? | An instance of a class. |
| What is Inheritance? | Inheritance means one class can extend to another class. So that the codes can be reused from one class to another class. |
| What is Encapsulation? | Keeps variables that they don’t or shouldn’t have hidden from the user |
| What is Polymorphism? | A single object can refer to the super-class or sub-class depending on the reference type which is called polymorphism. |
| What is Abstraction? | process of hiding certain details and showing only essential information to the user. |
| What is meant by Method Overriding? | Allows a child to use a method differently from the parent class. |
| What is meant by Interface? | An interface is a template which has only method declarations and not the method implementation. |
| What is meant by Abstract class? | An abstract class can have both “Abstract” methods and “Non-abstract” methods that are a concrete class. |
| What is a checked exception? | Checked exceptions are found when we compile the program. |
| What is an unchecked Exception? | Unchecked exceptions are found when the program runs. |

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| What are the differences between Lists, Sets, and Maps in Java? | Regarding duplicates only Lists may have duplicates. Sets cannot. Maps can have duplicate values, but the keys are unique. They also differentiate in what order they are. List is ordered by insertion order; set is usually unordered and Maps are ordered by the ordering of their key. Finally Lists allow infinite amount of null elements, Sets allow only one, Maps all for one null key and infinite null elements. |
| What are the advantages of Exception handling? | The program wont totally crash and we find the problem by using a catch |
| What is the final keyword in Java? | Makes a constant, meaning it cant be changed. |
| What Is the Difference Between equals() and = = | .Equals is better for Strings and other objects. == is better for primative |
| What is “this” keyword in java? | Within an instance method or a constructor, this is a reference to the current object — the object whose method or constructor is being called. You can refer to any member of the current object from within an instance method or a constructor by using this. |
| What is JVM? | Java Virtual Machine is a virtual machine that enables the computer to run the Java program. |
| Which class is the superclass for all the classes? | The object class |