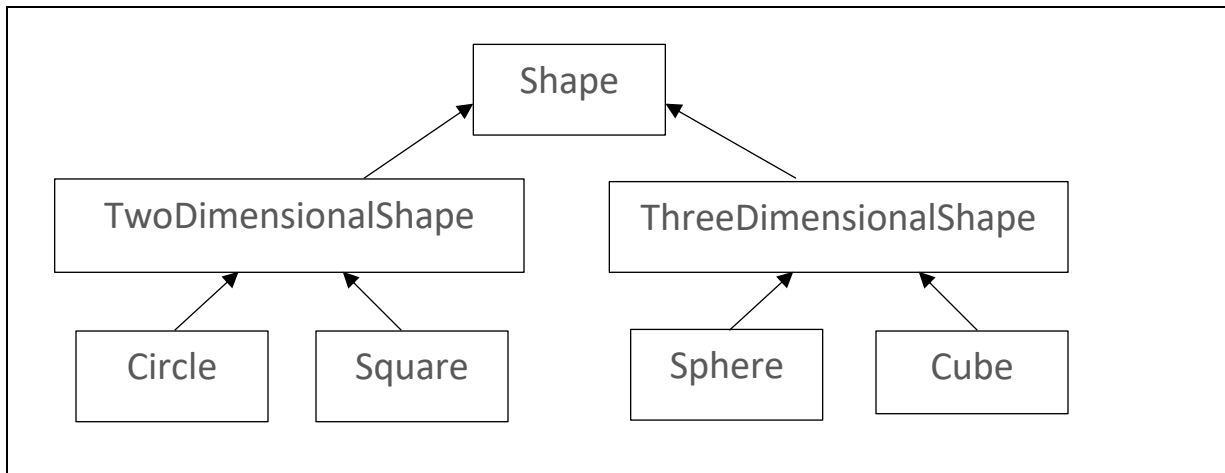


## Lab 1 – Reviewing JAVA

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Implement the Shape hierarchy shown in figure below.



- Each TwoDimensionalShape should contain method `getArea` to calculate the area of the two-dimensional shape.
- Each ThreeDimensionalShape should have methods `getArea` and `getVolume` to calculate the surface area and volume, respectively, of the three-dimensional shape.
- Create a program that uses an array of Shape references to objects of each concrete class in the hierarchy. The program should print a text description of the object to which each array element refers.
- Also, in the loop that processes all the shapes in the array, determine whether each shape is a TwoDimensionalShape or a ThreeDimensionalShape. If it is a TwoDimensionalShape, display its area. If it is a ThreeDimensionalShape, display its area and volume.