**A+ Computer Science BALL**

**Lab Goal :** This lab was designed to teach you more designing and writing classes. Use the same runner code below and associated comments to create a Ball class.

**Lab Description :** Write a Ball class that will simulate a Ball used for playing a sport.

The Ball will have a color, a type, air pressure, and air pressure capacity.

A Ball is flat is it contains less than half of the capacity of air.

Air can be added up to the capacity.

**Sample Runner Code :**

Ball b = new Ball( 30, 11, "RED", "BASKETBALL");

System.out.println( "AIR Pressure " + b.getPressure() );

**Files Needed ::**

**Ball.java**

**BallRunner.java**

System.out.println( "AIR Capacity " + b.getCapacity() );

System.out.println( "BALL Color " + b.getColor() );

System.out.println( "BALL Type " + b.getType() );

System.out.println( "Is Ball full of AIR " + b.isFull() );

System.out.println( "How much air is needed " + b.needsAir() );

System.out.println( "Is Ball FLAT " + b.isFlat() );

System.out.println( "Adding 20 to pressure " + b.addAir(20) );

System.out.println( "Adding 20 to pressure " + b.addAir(20) );

System.out.println( "Is Ball full of AIR " + b.isFull() );

System.out.println( "Is Ball FLAT " + b.isFlat() );

**Sample Output :**

AIR Pressure 11.0

AIR Capacity 30.0

BALL Color RED

BALL Type BASKETBALL

Is Ball full of AIR false

How much air is needed 19.0

Is Ball FLAT true

Adding 20 to pressure true

Adding 20 to pressure false

Is Ball full of AIR true

Is Ball FLAT false