Block Project – Part 1

**Description**

Write a mutable Block class. A block has 5 properties: x, y, width, height, and color. Part of a UML diagram is provided below.

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| **Block** |
| -x: int  -y: int  -width: int  -height: int  -color: java.awt.Color |
| +Block()  +Block(x: int, y: int, width:int, height:int)  +Block(x: int, y: int, width:int, height:int, color:java.awt.Color)  +setX(x: int) : void  +setY(y: int) : void  +setWidth(width: int) : void  +setHeight(height: int) : void  +setColor(color:java.awt.Color): void  +setPos(x: int, y: int) : void  +getX(): int  +getY(): int  +getHeight(): int  +getWidth(): int  +getColor(): java.awt.Color  +contains(xPos: int, yPos: int) : boolean  +draw(g: Graphics) void  +toString() : String |

+ and - : indicates the method/field is public and private respectively

+Block() : Constructor that creates a Block at position(100,1500), a width of 10, a height of 10 and the color black.

+Block(x: int, y: int, width:int, height:int) : Constructor that creates a Block set to the specified arguments and the color black.

+Block(x: int, y: int, width:int, height:int, color:java.awt.Color) : Constructor that creates a Block with the specified arguments.

+contains(xPos: int, yPos: int) : Returns true if the xPos and yPos is withing the boundary inclusive of this block and false otherwise.

+draw(g: Graphics) : Draws the block via the Graphics reference using it’s attributes(use setColor() and fillRect()).

+toString() : Returns a String representation of this object in the format “x y w h color”. Invoke the toString() from the Color class.