

QUESTION: 4

Date: _____

BEGIN main

DECLARE x, y as integers

PRINT "Enter the x coordinate:"

READ x

PRINT "Enter the y coordinate:"

READ y

IF $x == 0$ THEN

IF $y == 0$ THEN

PRINT "Point lies on origin!"

ELSE

IF $y > 0$ THEN

PRINT "The point lies on positive y -axis."

ELSE

PRINT "The point lies on negative y -axis."

ENDIF

ENDIF

ELSE

IF $y == 0$ THEN

IF $x > 0$ THEN

PRINT "The point lies on positive x -axis."

ELSE

PRINT "The point lies on negative x -axis."

END IF

ELSE

DECLARE quadrant as integer

IF $x > 0$ THEN

IF $y > 0$ THEN

quadrant = 1


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ELSE
    quadrant = 4
END IF
ELSE
    IF y < 0 THEN
        quadrant = 3
    ELSE
        quadrant = 2
    END IF
END IF
SWITCH (quadrant)
CASE 1:
    PRINT "(x, y) lies in 1st quadrant" BREAK
CASE 2:
    PRINT "(x, y) lies in 2nd quadrant" BREAK
CASE 3:
    PRINT "(x, y) lies in 3rd quadrant" BREAK
CASE 4:
    PRINT "(x, y) lies in 4th quadrant" BREAK
END switch
END IF
END IF
RETURN 0
END main
```